



# REPORT

ON THE HEALTH OF THE

# CITY OF LIVERPOOL

FOR THE  
YEAR  
1962

BY

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## PREFACE

MY LORD MAYOR, LADIES AND GENTLEMEN,

It is my pleasure to present to you my eleventh Annual Report, the 115th in the series of Annual Reports of the Medical Officer of Health of this City. The year has been one of steady progress, during which the poliomyelitis campaign was completed by the administration of 365,711 doses of Sabin vaccine. The value of the campaign was immediately evident as we had no cases of paralytic poliomyelitis during the year.

During 1962, the birth rate remained stationary at 22·1. It is most **Vital** encouraging to report a further substantial fall in the stillbirth rate to 19·8 **Statistics** per 1,000 total births. This compares with 22·5 in 1961. This significant improvement is reflected particularly in a corresponding fall in the perinatal mortality rate to the lowest figure ever recorded in the City of 35·4 compared with 38·2 in 1961.

The infant mortality rate has fallen slightly during the year from 28·3 in 1961 to 27·97. A disappointing feature is the increase to 6·2 in the percentage of illegitimate live births compared with 5·7 in 1961. The 1962 figure is the highest figure in the City for 16 years. This increase in the illegitimate birth rate has also been reflected in an increased infant mortality rate amongst illegitimate children which has risen to 34·31 per 1,000 which represents an adverse change.

There has been no major change in the death rate from carcinoma in the City although the number of deaths from carcinoma of the respiratory tract has decreased to 484 compared with 525 in 1961.

During 1962 there was a reduction in the total number of confinements **Midwifery** which took place at home. During the year, 4,768 domiciliary births **Service** occurred compared with 4,936 in 1961 and 5,036 in 1960. The percentage of home births was 23·8 and the hospital births rose to 74 per cent from 71·3 per cent while 2·2 per cent were born in nursing homes. Although the number of hospital confinements increased, many of the mothers and babies were discharged early during the lying-in period and very few stayed for



the full ten days. A total of 2,691 mothers and babies discharged before the tenth day were cared for by the midwives after their return home, but many more patients left hospital between eight and ten days after their confinement, and were visited by the health visitors.

A table is given in the annual report showing how the discharge from hospital, which originally took place on the tenth day, is occurring earlier in the puerperium. This situation has arisen because more women are delivered in hospital while the number of hospital beds has remained the same. This trend has produced many problems. Many mothers returning home thought that they were fit to do all their house work, all needed some degree of nursing care and this meant an increased nursing load for each midwife.

#### Midwifery Staff

There was an improvement in midwifery staff and, at the end of the year, the staff consisted of a non-medical supervisor of midwives, two assistant supervisors and 59 full-time midwives, three of whom cared for premature babies. This is a substantial increase over the 50 full-time midwives at the end of 1961 and has meant that it is possible to reduce the case load per midwife to a much more realistic one. It is hoped, in the near future, that it will be possible for a single-handed trained midwife to deliver 60 cases per year, and a trained midwife with pupil 90 cases a year.

The introduction of furnished accommodation has continued to help and at present eight unmarried midwives live in furnished accommodation provided by the City. In addition, from time to time, one or two midwives have occupied rooms in the district nurses' hostel at 1, Church Road, Walton, whilst awaiting the allocation of Corporation houses or flats. Altogether 36 midwives occupy 33 Corporation houses or flats.

#### Equipment

There has been an increase during the year in the use of disposable equipment, so cutting down the risk of cross-infection. Not only are disposable face masks used, as mentioned last year, but at present midwives have, in addition, disposable caps and towels.

#### Analgesia

Gas and air analgesia was administered to 3,051 mothers delivered by municipal midwives, and trilene analgesia to 106. In the case of the Liverpool Maternity Hospital district midwives 997 patients were given gas and air analgesia and trilene was given to five. The total number of patients who received pethidine or pethilorfan was 3,269.

During the year, after many consultations between the Ministry of Health and the United Liverpool Hospitals Board, it was agreed that, with effect from the 31st March, 1963, the Liverpool Maternity Hospital would no longer undertake district training of pupil midwives, and that their five district homes would close from that date, and the local authority take over the work in these areas. This will bring to an end a system which has operated since 1948. In its place, it is hoped to extend the Part II training scheme at present in Sefton General Hospital to other general hospitals in the City.

During 1962 the work which the three specially trained midwives have undertaken in the care of premature babies has continued. Of the 160 premature babies born at home, 83 were able to remain there under the special care of a premature baby nurse. In addition, 594 premature babies who were born in hospital were transferred home later to the care of the specially trained midwives. The majority are so transferred after they have reached the weight of over 4 lbs. 6 ozs. As previously, all premature babies continued to be visited until their body weight was over 6 lbs. and they were making satisfactory progress.

The final stage of the poliomyelitis immunisation campaign in March, 1962, which was carried out using oral vaccine, brought about a change in the role of the health visitor. Instead of assisting the medical officer giving the injections the health visitor was now called upon not only to persuade all who had had injections in the first two stages of the campaign to have their third oral dose of vaccine, but to administer it to them. This meant that during the month of March the health visitors were engaged very largely on this work and during this period were unable to carry out many of their normal duties. It is, however, most satisfactory to recall the success of the third stage which is referred to later in the report.

Once again, there has been a continuation in the diversification of the work undertaken by health visitors and this now includes a very large amount of work to the whole family and particularly to the aged. In the last annual report special reference was made to the work being undertaken in this context with the geriatrician at Newsham General Hospital and this has continued during the year.

Much of the most difficult work undertaken by the health visitors continues to be in connection with problem families. Continued co-operation was carried



out between the health visitors and the voluntary bodies throughout the year and many case conferences were held. In eight instances it was thought that a period at Brentwood convalescent centre would benefit the families and this was arranged.

**Co-operation  
with General  
Practitioners**

Co-operation between the health visitors and general practitioners has increased during the year in many parts of the City. This took many forms including meetings at the doctor's surgeries and clinics to discuss medical and social problems affecting the patients whom the doctor was visiting. In some practices monthly meetings between health visitors and other social workers continued to be of great interest and assistance. Two general practitioners in different parts of the City have continued to hold infant welfare clinics where they attended in a consultative capacity, and the services of health visitors were needed to attend those mothers and babies not requiring the advice of a doctor.

**Liaison with  
Hospitals**

The liaison work between health visitors and hospitals has continued throughout the year. This includes not only the special diabetic health visiting services to which reference has been made in many past annual reports, but work with epileptics, children and maternity hospitals.

**Maternity  
and Child  
Welfare  
Clinics**

During the year the new health centre at Mill Street was opened and this brought the total number of maternity and child welfare clinics operating in the City to 27. There was a continued decline in the attendance at ante-natal clinics and six sessions at such clinics were discontinued during the year. However, midwives sessions were increased in number and have been very well attended. In addition a health visitor attended these sessions to hold mothercraft classes. Throughout the year mothercraft classes were held at local authority clinics and nearly 1,000 ante-natal patients made 4,600 attendances at these clinics, where instruction was given on such subjects as personal hygiene, diet, sleep, the mechanism of labour, together with simple exercises in preparation for labour.

**Child  
Welfare  
Clinics**

There was a welcome increase again in the number of children who attended child welfare clinics during 1962 when a total of 17,991 children under the age of five made 107,254 attendances.

**Health  
Education**

Reference is made in the annual report to the various activities which the health visitor and other members of the department have been carrying out in the health educational field during the year. These include the

running of two parents' clubs, one in Norris Green, and the other attached to Sarah McArd Day Nursery, as well as meeting the requests of many organisations to provide lecturers on many different topics.

In addition the usual health education exhibit was mounted at the Liverpool Show and visited by about 9,000 people.

Development in the home nursing service continued in Liverpool in 1962. The number of nursing treatments carried out during the year by the nurses was 350,018 which is 5,062 more than the previous highest figure ever carried out in Liverpool in 1961. In addition, 5,040 late night visits were made to give sedatives, morphia, etc., and this represented an increase of 254 over the previous year.

The pattern of the work has also continued to change as many more geriatric cases have been nursed and this has meant that each visit has tended to take longer. With the impending reduction in the number of acute beds in the hospital service in the future, it is clear that a larger measure of responsibility and service will tend to fall on the home nursing service. Every effort has been made throughout the year to recruit staff and to interest newly qualified student nurses in district training. The training school is being built up with this in mind.

The incontinent laundry service has continued to be most valuable during the year and, in 1962, 229 patients availed themselves of this service. This is a substantial increase from the 116 helped in 1961. To enable needy persons to make full use of this service, a loan scheme was started to make sure that an adequate supply of linen is present. Also, during the year, absorbent pads were used by the district nurses for incontinent patients and these have been found to be of great assistance and help.

During 1962 there was a continued and heavier demand for home nursing equipment and the number of items of equipment loaned during the year was 5,049 which is a substantial increase over the 4,279 items loaned in 1961. This service, which is being built up rapidly, still needs to be increased to meet the ever growing demand, and it is clear that as the number of acutely ill people being treated at home tends to rise, there will be a greater need to supplement this service in the future.

There has been an increase in the number of private day nurseries registered with the local authority. At present eighteen such nurseries and child minders are registered under the Child Minders Regulation Act of



1948. This compares with eleven day nurseries registered at the end of 1961. All these nurseries have been regularly visited by one of the assistant medical officers to check standards and give advice and help on any matters concerning the welfare of the children in them.

In addition the twelve local authority day nurseries have continued to provide accommodation for 670 children.

During the year, following an inspection by the Ministry of Health and Ministry of Education, the two day nurseries, The Elms and St. George Square, have been added to the list of nurseries approved as training centres for students taking the nursery nurses examination. This means that there are now eleven training nurseries in Liverpool.

In 1962 an analysis was carried out of the reasons for admission to day nurseries, and in the text of the annual report the reasons found in 1962 are compared with a similar analysis in 1957. It is interesting to note that the main cause of admission in 1962 was not unmarried mothers seeking admission for their children but divorced and separated parents with insufficient allowance. There has also been a substantial increase in the percentage of admissions arranged for domestic emergency. From these figures, it can be deduced that the provision of day nursery accommodation has helped to make it possible for children to remain in their own homes, even after break-up of the family or when the family is faced by some emergency such as the acute illness of one of the parents.

#### **Chiropody Service**

This service has continued to develop satisfactorily during 1962. In particular, the appointment of the first full-time chiropodist has resulted in a substantial increase in the number of domiciliary visits paid. During 1962 there were 1,024 domiciliary visits which is 478 more than in 1961. The attendance rate at the various clinics has continued to be high and there is no doubt that this service is meeting a very important need particularly for the aged in the City.

#### **Home Help Service**

Reference was made in last year's report to the reduction in the home help service as a result of a cut in the estimates. In February, 1962, this restriction was removed and during the remaining part of the year there was steady and gradual recruitment in home helps so that by the end of 1962 the total number of home helps was 322 compared with 234 at the beginning of the year. There was, correspondingly, an increase of 803 in



the number of households assisted in 1962 making a grand total of 3,614 assisted. As previously the largest increase was seen in the group of chronic sick including the aged and infirm. There is little doubt that this increase of staff has helped considerably in maintaining the domiciliary care of many old, sick people at home, but there is still urgent need for further development of this service, as the demand increases daily.

The year was characterised in the infectious disease field by an overall **Infectious Disease** reduction in the amount of serious infectious disease occurring in the City. The only exception was measles for, in every other instance, there was a reduction in the number of cases recorded.

10,711 cases of measles were notified during the year. This was the **Measles** highest notification since 1940, being a few more than the large-scale outbreaks in 1951, 1953 and 1957. The disease was relatively mild and, as usual, it effected mainly children under the age of eight years.

Once again there was a most satisfactory reduction in the number of **Whooping Cough** cases of whooping cough occurring in Liverpool in 1962. 208 cases were notified compared with 341 in 1961 and 1,460 in 1960. Examination of the immunisation state of the notified cases showed significantly less hospital admissions among the immunised than in the non-immunised which confirms that the disease, when it does occur in the immunised, is much less severe. There were no deaths from whooping cough during the year.

Only two cases of poliomyelitis were notified and confirmed during 1962. **Poliomyelitis** On only one previous occasion (in 1942) were there a smaller number of cases notified in Liverpool since notification of poliomyelitis commenced 50 years ago. 1962 was a year of low incidence of this disease, but the number of cases fell so dramatically that it is most encouraging for the future. Although the year saw a low incidence generally of poliomyelitis throughout the country, this exceptionally low figure is very likely connected with the very successful poliomyelitis immunisation campaign in 1961 and 1962 which must have resulted in substantial immunity for the majority of the population of this City.

There has been a further small reduction in the number of notified cases **Dysentery** of dysentery during the year, there being a total of 296 cases occurring in Liverpool in 1962. Details are given of the work which was carried out with this disease, particularly in schools and day nurseries throughout the City, which has resulted in a reduction of the incidence in these areas.

**Enterovirus  
Survey**

Details are given in the report of the Enterovirus survey which has been carried out in co-operation with the Public Health Laboratory in Liverpool. Once again evidence is coming forward that there is a reduction in the amount of enterovirus infection, almost certainly due to the successful poliomyelitis campaign.

**Food  
Poisoning**

It is most satisfactory to report that during 1962 there has been a marked reduction in the amount of food poisoning occurring in the City. The number of notified cases fell from 99 in 1961 to 37 in 1962. What was more significant was that the majority of these notified cases, when fully investigated, turned out not to be food poisoning at all, and no major outbreak occurred in Liverpool in 1962. Reference to recent annual reports will show that there has been a very vigorous campaign exercised during the past years to reduce the incidence of this disease and it now looks as if this campaign has been successful.

**Influenza**

There was no epidemic in 1962 of influenza in the City of Liverpool.

**Immunisation  
and  
Vaccination.  
Poliomyelitis  
Immunisation  
Campaign**

Once again the main highlight of the year's scheme of immunisation and vaccination was the completely successful third stage of the poliomyelitis campaign started in 1961 to protect the majority of the citizens of Liverpool against poliomyelitis. In March 1962, 365,591 persons received a third dose of oral poliomyelitis vaccine and this means that a very high percentage of the population of Liverpool are now satisfactorily protected against this disease.

It is hoped that every step will now be taken to ensure that this high level of immunisation is maintained by continuing to vaccinate orally all newly born infants within their first year of life, and particular stress is now being laid on this aspect of the work.

**Diphtheria  
Immunisation**

During the year a total of 10,003 persons were immunised against diphtheria. This is a figure which is slightly lower than in recent years but has to some extent been affected by the extra effort which it was necessary to put into the third stage of the poliomyelitis immunisation campaign. One satisfactory change in this year has been the greater emphasis on booster doses and in all, 4,304 children were given booster doses in school compared with 3,696 in 1961. In addition, 332 more children were immunised for the first time in schools than in previous years. It cannot be stressed too strongly, of course, that the freedom from



diphtheria which has been evident in this City and the country for many years now is almost entirely dependent upon a high level of diphtheria immunisation and it is essential that this be maintained at all times.

During the year, 8,848 children were immunised against whooping cough with a primary dose and 2,166 were given booster doses.

**Whooping  
Cough  
Immunisation**

There has been a rapid increase in the amount of tetanus immunisation given during the year with the introduction of triple vaccine and altogether 3,865 children were protected in this way against this disease.

**Tetanus  
Immunisation**

The number of smallpox vaccinations in 1962 was 18,916 compared with 3,808 in the previous year. This increase was mainly due to the anxiety caused by cases of smallpox arriving in other parts of the country from Pakistan, and this led to a greatly increased interest in vaccination. Another technical reason for the increase was that the age at which vaccinations were carried out in 1962 was reduced in the early part of the year but increased again towards the end of the year. This will have the effect that in the following year the figures are bound to be exceptionally low and it will not be until 1964 that it will be possible to get an accurate assessment of the overall effect of this age change.

**Smallpox  
Vaccination**

Yellow fever inoculations have continued to take place during the year at the Health Department and during 1962 a total of 3,490 persons have been protected against this disease.

**Yellow  
Fever  
Inoculation**

Details are given in the text of the annual report of the difficulties which have been experienced during the year in the use of the fumigant, methyl bromide. These fumigants, which are most effective, are poisonous to man and need to be handled by personnel using respirators. The only safe way in which they can be used is to add a lachrymator gas such as tear-gas when the fumigator will be warned in good time if he is being subjected to a poisonous mixture of tear-gas and methyl bromide. Unfortunately there are no regulations at present which can be enforced to control adequately the use of methyl-bromide and experience has shown that advice given by the department has not been followed in all instances.

**Health  
Hazards  
in Fumigation**

Reference is made to a particular instance in which one firm continued to use pure methyl-bromide after an accident and the man involved in the first accident was poisoned in the second accident seriously. It seems clear that this experience emphasised the importance of considering regulations to cover this health hazard.

**Control of  
Radiation  
Hazards**

Details are given of the routine work which goes on in the health department to control radiation hazards resulting from the transit of radio-active substance through the city and port. No serious problems occurred although in one instance the need for accurate labelling on the radio-active source was apparent and taken up with the authorities concerned. Special routes are worked out and used for the transport of dangerous materials with the co-operation of the Police and Mersey Tunnel Manager to ensure that maximum safety is maintained at all times.

**Tuberculosis**

It is a little disappointing to report that 1962 saw a slight rise in the number of new cases of tuberculosis discovered compared with the number of cases found in 1961. In 1962 there were 438 pulmonary cases and 50 non-pulmonary cases notified compared with 410 pulmonary cases and 50 non-pulmonary cases in 1961. This almost certainly indicates that a new phase in the fight against this disease has been entered. The spectacular fall following the mass X-ray campaign, 1959, has been halted and it is clear that a further attack will be necessary to reduce the new notification rate. This attack, it is hoped, will include increased assistance with housing and it is most satisfactory to report in this respect that during the year the new system of assisting people directly, by housing from a block allocation of 180 houses for medical reasons, has been most successful. It is also hoped to concentrate the work of the tuberculosis visitors more and more on the special visits associated with new cases and in this way, to increase contact tracing. It is, however, important to realise that the halting of the fall in the number of cases is a serious challenge to the health and hospital service of the City and the time when tuberculosis will no longer be a problem in this City appears to be still some way off. In the last two annual reports reference was made to the problems created by slack taking of drug treatment by patients treated at home, and work undertaken this year so far has not indicated that this problem has greatly improved. If this continues it may well be that it is unlikely that a significant reduction in the number of cases of tuberculosis will occur until there is an increased proportion of persons being treated for the disease in hospital rather than at home.

**The Unco-  
operative  
Tuberculosis  
patient**

Once again, in four cases, it was necessary to use the compulsory admission procedure under Section 172 of the Public Health Act, 1936, to insist on compulsory admission to hospital of open infectious cases of tuberculosis. It is, however, most important to realise that however useful this section has been, its main value is far greater than can be measured by the number



of cases upon which it is used, for very many other patients are persuaded to go into hospital knowing that if they do not, they can and probably will be compelled to do so under this Section of the Act.

The venereal disease figures for gonorrhoea have risen during the years 1959, 1960 and 1961. It is satisfactory to report that there has been no further rise in 1962 in these figures, there being 1,262 cases in males compared with 1,273 in 1961, and 297 compared with 364 females. There has been a rise in the number of early cases of syphilis diagnosed during the year, but this increase is mainly due to the incidence in seamen, many of whom are not Liverpool residents.

The mental health service during 1962 showed solid advancement along the lines already envisaged in earlier annual reports. These are, of course, based on the principles of the Mental Health Act, 1959, which might be said to contain three major aims:—

- (a) that the treatment and care of all mentally disordered people should be regarded as part of the main stream of the National Health Service and that therefore all treatment and admission should be along similar lines to patients suffering from physical illness;
- (b) that the use of compulsion should be minimal;
- (c) that there should be much more emphasis placed on the importance of community care of the mentally disordered, and less on their retention in hospital.

Reference is made in the annual report to difficulties which have been met in staffing and organisation. The gap in the past as regards proper training schemes for mental welfare officers has to some extent been filled by the setting up of two-year courses as recommended under the Youngusband Report. In 1961 two officers from the mental health service were seconded on full pay to the Liverpool course and arrangements are being made for a further two officers to go in 1963. However, it will be clear that there must be a limit to the number who can be spared for two years' absence and it will be many years before a substantial number of qualified mental welfare officers will be working in the department.

In an attempt to improve matters, the department has also instituted its own training scheme, whereby it takes in up to six trainees in the general establishment of mental welfare officers. These trainees, who are selected



carefully, with a very sound basic education, are trained within the department by senior mental welfare officers, spending three months in home visits and special duties, two weeks at training centres, and one week at the mental health centre. During this period, visits of observation are paid to other services, hospitals and organisations, and lectures and discussions are given on many aspects. After the first three months, the trainees are given a small number of cases to visit under the guidance of a senior mental welfare officer. Eventually it is planned to second each of these trainees to the two-year Younghusband course.

There is, however, no similar satisfactory arrangement for the staff of training centres, and the Committee have continued to rely on the only qualification recognised, the Diploma granted by the National Association for Mental Health. Two or three officers are seconded to this course each year.

With the development of adult centres and workshops, a further problem is arising as regards the training of personnel to work in these centres. In Liverpool, the three industrial units which have opened in New Hall Fazakerley, in the year, are at present staffed by men of widely differing backgrounds and it is fortunate that they have been able to be welded together into a successful practical team, although many of them have never had any previous experience of dealing with the mentally disordered.

### Community Care

Full details are given in the general text of the annual report of the work undertaken during the year in relation to community care visiting of the mentally disordered. A total of 16,770 home visits were made during 1961 and details are given in the report of a few interesting isolated cases. The case histories show that very often spectacular results are not possible and that, after much care and help, disappointment may face the relatives and mental welfare officers who have been attempting to assist many of the mentally disordered people. These problems not only emphasise the need to develop a reliable community care service, but also that its success must never be judged on the personal histories of a few patients.

A feature of the year's work has been the wide variety of sources from which patients have been referred and this is most encouraging for it indicates that more and more social agencies are realising the value of the mental health community service. It is also pleasant to record that many personnel officers of industrial concerns in the City are making increasing use of this service on behalf of their work-people.

Considerable improvement has been achieved during the year in the services available for the mentally subnormal in Liverpool. The opening of new training centres, increased attention to home visiting, short term care, and work schemes, all point to new interest in this field. Details are given of the problems facing those children referred to the department as unsuitable for education in school and these once again stress the difficulty that many cases face.

At present there are five children's training centres with 320 places, one adult training centre with 60 places and three sheltered workshops giving 180 places in Liverpool. This makes a total number of training centre and workshop places of 560. When it is remembered that two years ago the total number was 300, it will be realised that an enormous increase has occurred following the opening of the New Hall Centres at Fazakerley.

The work at the junior training centres has continued along the usual lines during the year but has been rendered much more efficient by the removal of the overcrowding consequent upon the opening of New Hall. One of the main problems which has been noticed in this field is the demand for places for children of very low grade and those who have severe physical handicaps in addition to mental subnormality. These children need special attention which can best be given in separate units or classes and it is planned to have such classes at each of the junior training centres. All centres have, in fact, admitted a number of such children during the year but the special classes cannot be expected to operate fully until door to door transport is provided for the worst cases. In this respect it is certain that as soon as a handicapped persons' transport service is instituted there will be a marked increase in the work which can be undertaken in this respect.

Reference is also made to the valuable work which is being undertaken in the City by the Dorothy Keeling Special Care Centre, the unit sponsored by the Liverpool Society for Mentally Handicapped Children. A visit by the Health Committee was paid to the unit early in the year and as a result of this a grant to the society was made of half the cost of each child's attendance.

Undoubtedly the most spectacular progress during the year in the field of mental health has been the immediate success and consequent extension of the sub-contracted work scheme at New Hall for mentally subnormal



adults. There have been certain difficulties attendant upon the off-centre location of New Hall, Fazakerley, but this site has also proved convenient in one respect. A large firm with premises within the area helped to start the scheme by providing regular work involving a process of making cartons which even quite low-grade people are able to do. From this start the work has steadily increased and during the year work to the value of over £2,500 was undertaken in the centres and this sum distributed to the workers without deduction. On an average 160 subnormal adults are now receiving a regular pay packet each week and this has given a tremendous boost to morale and self-respect, and marks a very important step forward in the department's social welfare activity. A third centre at Fazakerley has had to be opened in addition to the two originally used for this purpose and such has been the response that all three are now full.

The success of the scheme confirms what much research done in recent years has shown, that severely subnormal people have a much greater capacity for work than had been at first imagined, and that they can play a fuller and more useful part in the community when they are employed in such workshops. A scheme for a purpose built workshop has been submitted and approved and it is hoped that progress will start soon on the building of it at Fazakerley. It is planned to be built in the New Hall area and will cater for approximately 350 mentally disordered persons. When this new workshop is opened it will enable the three centres now used to revert to training centres, one probably for adults and two for children.

Mental  
Welfare  
Centre,  
Johnson  
Street

The mental welfare centre in Johnson Street which was opened in December 1961 saw its first full year of operation in 1962. It caters mainly for mentally ill people discharged from hospital but also others who do not want or do not need to have hospital treatment. Mental welfare officers are able to refer patients on their lists and see for themselves the progress made. A much smaller group is involved than those under training in the centres for the mentally subnormal. It is important to realise that, in most cases, training has a different object, for the mentally ill it is rehabilitation rather than occupation and this must be the guiding rule.

Patients with widely differing abilities and temperaments have attended during the year. Some have come from a home where they were completely idle and never went out, and consequently, on arrival, were only able to concentrate for a few minutes on simple tasks. It has not proved easy to devise a programme in which all these different patients can be welded

together but, by trial and error, a daily routine has been established which has been successful. All patients are started on simple tasks in the morning under careful supervision and observation, and progress is made to more difficult work after they have been in the centre for some weeks and have gained confidence. Their confidence is also improved by such activities as shopping for their mid-day meal and cooking it. Mornings are mainly given to productive work which is sold and profits allocated to the patients, whereas in the afternoons recreational activities such as dancing, discussions and quiz games, play-reading, hairdressing and beauty culture, etc., have all played their part. An attempt is made to encourage qualities which many of these patients have lost, concentration, pride in appearance, an interest in the outside world, and above all help in giving them back some self-confidence and the ability to mix with others. Once a week a well attended weekly evening club is held at the centre and outings are made to places of interest. One very successful feature of the year's work was the week's stay in a holiday camp in North Wales when sixteen patients supervised by two occupational therapists had a most enjoyable time and greatly benefited as a result. Whilst it is not claimed that every patient wants or is suited to the daily communal activities in the mental health centre, there is no doubt at all that the attendance and enthusiasm shown at this centre has emphasised the importance of the work done.

Details are given of the short-term care carried out during the year to **Short term**  
enable parents to have a break from the care of subnormal children. **care**

Plans are complete to provide in New Hall thirteen hostels for about 150 **Hostels**  
people by adapting existing buildings. Progress during the year on this project has been slower than anticipated but a contract for the first of two phases into which the work of adaptation has been divided, was placed at the end of 1962.

The perennial problem of shortage of hospital places for the mentally subnormal has again been raised during the year and at the end of 1962 a deputation met the Regional Hospital Board once again to consider this problem. At present there are 43 patients on the waiting list in the top urgency category and although this figure is not as bad as some years ago it is still sufficiently high to cause concern. It is hoped that in the light of the Regional Hospital Board's plans to expand this accommodation some improvement may be expected.



**Admission of  
Mentally Ill  
Patients to  
Hospital**

Considerable reference was made last year to the changing pattern of hospital admissions for the mentally-ill following the introduction of the Mental Health Act, 1959, and it is most depressing to report that there has been a further increase in the number of compulsory admissions arranged during the year, there being 1,187 such admissions compared with 1,073 in 1961 and 879 in 1959. The reasons for this increase are discussed and they include a greater proportion of older people than previously and also the problem of early hospital discharge with consequent further early re-admission which has played such a part in increasing these numbers.

The other point which is, at present, causing concern in Liverpool is that all discharges from mental hospitals are not being notified to the health department and this has meant that it is quite impossible to devise a completely comprehensive mental health service. This was clearly envisaged by the Mental Health Act and the whole problem is carefully discussed in the annual report. Clearly it is going to be impossible to run any community mental health service unless there is complete co-ordination between hospitals and local authorities in this respect.

**Ambulance  
Service**

During 1962 the total number of patients moved by the ambulance service was an all-time record of 251,818 as compared with the previous highest figure in the year before of 240,032. However, an outstanding feature was that this larger number of patients was moved by the ambulance service with a decrease of 26,339 miles. This is the first time in the history of the service that there has been a decrease in mileage in a year when there has been, at the same time, an increase in the number of patients carried. Undoubtedly this has been brought about by the introduction of hospital transport officers who have been able to co-ordinate journeys, and, through liaison between hospitals and ambulance control, avoid much duplication of mileage and thus add to the efficiency of the service generally.

**Communica-  
tions**

To meet the increasing demand for ambulance transport, the radio-communications equipment has been altered with the introduction of new equipment. This has enabled calls to be attended to more quickly and has speeded up the deployment of emergency and general cases to the out stations. The new system allows for all emergency calls to be passed to the nearest accident ambulance station and, in the case of a large-scale emergency, every ambulance station, the police, the emergency bed bureau and hospitals to be alerted simultaneously. In addition, individual hospital transport



officers can communicate with each other and at the same time the control staff can listen in to the arrangements being made. This increased permutation of information has been a great asset to all the personnel concerned and has kept delays down to a minimum during the year.

During 1962, at last it was possible to replace a number of the domiciliary occupational therapy staff who had resigned previously. Throughout the rest of the year the service steadily developed and reference is made in the mental health section of the pioneer work done in the Johnson Street mental health centre.

**Occupational  
Therapy**

The unit in Rumney Road has continued to do an excellent job in rehabilitating patients and during 1962 a number of them have gone on to the Ministry of Labour's establishment for further training. A number of people who have previously been confined to their homes for many years, convinced that they could not do anything at all, have found a new interest in life and have been taught new skills appropriate to their disability. Many have been further rehabilitated into industry. During the year a contract for rubber linked mats was placed with the unit and this has helped to provide work for the patients.

**Occupational  
Therapy and  
Rehabilita-  
tion Unit**

A very successful one day outing was arranged for a number of handicapped persons in two 40-seater coaches to North Wales. Many of these patients had never been away for a day for many years and the visit was very greatly appreciated. A further party of mentally ill patients, accompanied by two of the occupational therapy staff, spent a week at a holiday camp in Colwyn Bay. The venture was so successful that it is planned to increase the group next year to include both mental and physically handicapped patients, and take them to a holiday camp in Morecambe.

The problem of finding suitable housing accommodation for the severely handicapped increases each year. Liaison is good between the Lettings Section of the City Architect and Director of Housing, and the occupational therapy section, but often the combined efforts of the two departments find it difficult to provide suitable accommodation, either for adaptation or alteration. During the year, two houses were adapted whilst under construction for two very severely handicapped people and their families and they were installed in the beginning of 1963.

**Assistance  
with  
Housing**

Details are given in the text of the annual report of many interesting cases dealt with by the occupational therapy service during the year and there is no doubt at all that this service is playing a very vital part in the community health services of the City.

Welfare  
Services:  
Provision of  
Residential  
Accommoda-  
tion

For the last few years it has been necessary to point out the disturbing increase in the number of elderly persons on the waiting list for residential accommodation. The figures concerned over the past seven years are given in the following table:—

No. of persons waiting for residential accommodation on 31st December each year

1956	1957	1958	1959	1960	1961	1962
176	90	232	228	248	214	333

This table shows quite clearly that the trend is upwards and already the size of the waiting list is such that it makes it quite impossible to accommodate, for many months, all the people who are urgently awaiting accommodation. Although there may be some temporary easing of the situation in the near future with the opening of Melwood House, Leyfield, and later the new hostel at Westminster House, it seems unlikely that there will be any significant drop in the waiting list as it is planned to increase the speed of closure of Westminster House, for this means that accommodation will have to be found for the 620 persons at present living in Westminster House.

During 1962 the extension to Brookfield was completed and the enlarged building now accommodates 33 residents compared with the original nineteen. Arrangements were also made, temporarily, to occupy a house in New Hall, Fazakerley, for the whole of 1962 and also that it should be retained until March, 1963, to enable this useful accommodation to be used to ease waiting list problems in the winter months.

In 1962 the Royal Liverpool Babies Hospital in Woolton was purchased by the City Council and plans drawn up for the building of two homes in the grounds, plus a number of individual housing units for elderly persons. This site could provide excellent facilities for elderly persons of a group nature and could well be a unique and valuable social experiment.

Westminster  
House

During the year a decision was taken to postpone the further upgrading and modernisation of Westminster House because it is now hoped to replace this undesirable building more quickly with newer accommodation. Consultations have taken place with the Regional Hospital Board as they have



responsibility there for 310 hospital patients in this joint-user establishment. It is hoped that it will be possible to shut about half of Westminster House by the end of March, 1968, when the population should have fallen from the present 620 to 310. The final stage of "run-down" should occupy the time between 1968 and 1975.

Premises at Westdene in Birkdale, Southport, were acquired in 1962 as a holiday home. It was decided that this house should have a three-fold purpose; firstly, there should be a nucleus of permanent residents; secondly, residents of homes in Liverpool should be able to spend a fortnight's holiday there; and thirdly, a number of persons living in their own homes, but needing care and attention should be accommodated there for short holiday periods. By the end of 1962 about 290 elderly persons had visited Westdene and spent a most enjoyable holiday there. It is hoped to add to the amenities of this establishment in the future by the provision of a fire-escape, a lift, and improvements in the heating and hot water supplies. It is pleasant to record the valuable assistance which has been provided by the Merseyside Hospitals Council once again for amenities in homes for aged persons administered by the City Council. This generosity has enabled the purchase of pianos, modern television sets, radios, card-tables and other amenities which have been keenly appreciated by the residents in the homes.

There was little change in the number of persons using the temporary accommodation during the year, although there has been a slight reduction in the number. The maximum number of persons accommodated at any one time was 102 compared with 110 in 1961, and the minimum 42 compared with 43 in the previous year. Daily average accommodation throughout the year was 67 compared with 71 in the year before.

**Temporary  
Accommoda-  
tion**

The monthly meeting at officer level to consider the circumstances surrounding the admission of all newcomers to the temporary accommodation has worked very smoothly throughout the year and in addition a number of special case conferences have been held on particularly difficult cases.

Details are given in the text of the annual report of a number of interesting welfare cases which are representative of the sort of case which has been dealt with by social welfare officers in the health department during the year. Many of these cases illustrate that ignorance is still a serious problem and that fear of change often plays a major part in producing problems in elderly persons.

**Domiciliary  
Welfare  
Services**



**Removal  
to suitable  
premises of  
persons in  
need of care  
and  
attention**

During the year, it was necessary to remove compulsorily from their homes fifteen people under the provisions of the National Assistance Act, 1948 and National Assistance (Amendment) Act, 1951. This is exactly the same figure as the previous year.

**Mobile Meals**

A substantial increase in the number of mobile meals has occurred during the year which is most satisfactory as this service is undoubtedly one of the most valuable provided for elderly persons within the City. By the end of the year about 1,357 meals were being delivered weekly to a total of about 500 recipients. The majority of these recipients get three meals a week.

**Rest Centres  
for elderly  
persons**

The three rest centres in the City have again had a most successful year and emphasise the great value which this service provides in the lives of many elderly persons living within the City. During the year plans were completed for the permanent building of a River View Centre located in the new Maritime Museum Building which will eventually replace the present successful River View Rest Centre. It is most satisfactory to report that it will be possible to produce a centre which gives an uninterrupted view of the river which has been such an important feature in the present centre.

**Welfare of  
Handicapped  
Persons**

Use has continued to be made of 100 Walton Village for social and recreational purposes by:—

The Inskip League of Friendship.

The Invalid Tricycle Association.

The Liverpool Hard of Hearing Club, and

The Liverpool Spastic Day Fellowship.

In addition, centres for handicapped persons have continued during the year at Garston, Mill street, Knotty Ash and Walton Village although at times staffing difficulties have made it impossible to operate them continuously. It is hoped, however, that replacement staff which have now been recruited will enable this to be done.

**Blind  
Welfare  
Statistics**

Again there was a welcome reduction in the number of blind persons registered for the first time, there being 138 registered as blind, 60 as partially sighted, and six as not blind, compared with 163, 53 and twelve last year.

The increase in blind employment in open industry which has been commented on in the last annual report continues, there being 75 people in sheltered workshops and 114 in open industry. In addition to this there are eight home workers whose earnings are supplemented by the City Council.

During the year these workshops acted for the first time on an agency **Sir Robert Jones Workshops** basis for the City Council in the same way as the two workshops for the blind. The result has been that instead of payment towards expenses of wages, officers' salaries and also a special grant, an annual payment per worker is to be made. On the other side of the account the local authority will receive from the Ministry of Labour a grant which would normally have been paid direct to the workshops. At present 68 severely handicapped persons are employed at these workshops, mainly at the trade of book-binding, with a small number in the printing department or dealing with the renovation of Christmas cards.

The welfare of deaf and dumb persons in the City of Liverpool has continued to be done most satisfactorily by the two voluntary bodies, namely, **Deaf and Dumb Welfare** the Liverpool Adult Deaf and Dumb Benevolent Society, and the Catholic Deaf and Dumb Society of St. Vincent de Paul.

There has been an increase in the number of epileptics who are receiving **Epileptics** residential care at the cost of the Local Authority. The figure at present is 90 compared with 79 last year. These persons are mainly in three establishments administered by voluntary organisations and one administered by another local authority.

During the year a total of 658 general medical cases were awarded points **Housing Points Scheme** and 719 cases were recommended to the City Architect and Director of Housing for transfers. These were out of a total of 4,192 general medical cases dealt with during the year.

In addition the scheme mentioned in last year's report by which the Medical Officer of Health allocated up to 180 new lettings for tuberculosis and general medical cases has worked extremely well and has led to this number being housed on medical grounds during the year. This was allocated as 120 for tuberculosis cases and 60 for general medical cases. Details of individual cases are given in the text of the annual report.



**Medical  
Examinations**

During the year medical examinations continued to be carried out by the medical staff of the health department on all new officers, on manual workers entering the superannuation scheme, and on the grounds of extended sickness. There was an increase of just under seven per cent in the total number medically examined in 1962 over the 1961 figure and, in all, 3,120 medical examinations were carried out. Towards the end of the year new methods of examination were introduced whereby an electrocardiogram, a forced expiratory and volume spirometer, and an electrically operated blood pressure recorder were used in all instances, and arrangements were also made for bio-chemical investigations of blood and urine specimens to be carried out. To enable these to be carried out successfully three assistant medical officers have attended Sefton General Hospital cardiography unit where they have received special instruction in the use of these methods. The help which has been given by the Director of that unit and his colleagues, especially Dr. McKendrick and Dr. Coulshed of the Regional Cardiac Centre, has been greatly appreciated. There is no doubt that when these new methods of examination are completely installed they will represent a great advance on the type of medical examination being carried out at present and should act as a most satisfactory base line for further research, especially into the incidence of coronary thrombosis.

**Environ  
mental  
Health  
Control**

The plan for the training of public health inspectors has continued very satisfactorily and a total of eleven students gained the Certificate of the Public Health Inspector's Education Board and qualified for appointment as public health inspectors. The natural loss of staff is large and it is interesting to note that the number of new inspectors trained exactly equalled the number who retired or resigned.

**Common  
Lodging  
Houses**

There are at present 13 registered common lodging houses in the City providing accommodation for a total of 930 males and 94 females. During the year two lodging houses were licensed conditionally for six months, and in one instance permanent registration was deferred to ensure the existing low standard of cleanliness and general unsatisfactory conditions were improved. As a result of constant supervision maintained by inspectors during these months, these premises maintained a much higher standard of cleanliness, and during the latter months of the year were registered as lodging houses.

Complaints of dust nuisance have been relatively few during 1962. The matters investigated included excessive dust from tipping of lime and sand in a builder's yard, and the unloading of material in the factory of a firm making pre-cast concrete units. **Dust Nuisances**

A number of complaints are made to the department each year regarding excessive noise and there is no doubt at all that the public is becoming increasingly conscious of the annoyance of excessive repetitive noises. The investigation of this form of nuisance is never easy and has entailed much repetitive visiting, often late at night or early in the morning to confirm nuisances. In many instances it has been possible to effect improvements by agreement. **Noise**

It is encouraging to note that a proposed new Parliamentary Bill was published in November which included many provisions which would benefit office workers and would be a most valuable instrument in securing satisfactory working conditions for them. On many occasions in the past, attention has been drawn to the most unsatisfactory arrangements in respect of this and it is hoped that this Government Bill will go a long way to put them right. **Office Workers**

It is satisfactory to report continued co-ordination with H.M. Inspectors of Factories in respect of the duties which are allocated to the City Council. **Factory Inspection**

Progress has been made throughout the year in the establishment of more smoke control areas in the City. In particular, the No. 10 smoke control area, which was the largest so far envisaged, was introduced during the year. It is hoped that this smoke control area will be complete by the 31st October, 1963. **Atmospheric Pollution**

Improvements have continued to be noticed in existing industrial plants throughout the year and the increased amount of consultation in the management and control of modern boiler plants gives good indication of the co-operation of industries towards the smoke control aims of the City.

The No. 1 boiler house which, in the past, has been the most troublesome part of the three parts of Clarence Dock Power Station, was converted during the year from solid fuel to oil firing, and this means that at least one-third of Clarence Dock Power Station is now fired by oil with a low sulphur content. This change, and the improved technique now in use in the other two stations in Clarence Dock, has greatly reduced the emission of smoke and dust from this power station. **Clarence Dock Power Station**



During the year two more smoke control orders, Nos. 14 and 15, were submitted to the Minister of Housing and Local Government for confirmation, and a public enquiry was held following public objections. It is hoped that these Orders, which include parts of Allerton, Woolton and Church Wards, will become operative during June, 1964.

The programme for the complete smokelessness of Liverpool was approved by the City Council and a progressive policy is to be followed with the ultimate aim of the complete eradication of smoke nuisance by 1970. To reach this objective it will be necessary to tackle on an average 22,000 dwelling houses a year at an approximate annual conversion cost of £200,000.

#### Slum Clearance

During the year, 1,334 dwellings were surveyed as to their suitability for representation as unfit for human habitation and of these, 1,257 were represented under the provisions of the Housing Act, 1957. Of these, 1,047 were located in seven different clearance areas.

The magnitude of the slum clearance problem which confronts Liverpool has been emphasised many times in the past few years. It is, however, important to realise that in 1955 the housing survey report showed 88,000 houses which did not conform to standards of fitness and almost 27,000 of these were scheduled then for demolition. Of these, at present a total of 13,627 have been represented for slum clearance. It is, however, important to realise that the rate of deterioration of many other houses has continued since 1955 and this means that, almost certainly, the present figure exceeds considerably the 1955 figure.

Full details of the work undertaken in slum clearance, in dealing with slum clearance areas and with individual unfit houses, is given in the text of the annual report.

#### Rodent Control

Details are given in the text of the substantial reduction which has occurred in the rodent population in the City during the past few years. Although minor infestations have been dealt with, there have been no major infestations found in the City for some years, and there is every indication that the infestations generally have greatly diminished in severity over the last few years.

#### Supervision of Food Supply

Work has continued throughout the year regarding the close supervision of the City's food supply. Daily visits have been paid to the wholesale fish market, Queen Square, the St. John's retail market and the wholesale fruit

and vegetable market at Cazneau Street, as well as to various wholesale food warehouses situated throughout the City. During the year, 2,374 special food complaints were made by representatives of the wholesale and retail trade and have been dealt with satisfactorily.

There was a marked increase in the rejection of both fruit and vegetables in the wholesale markets. Large quantities of grapes were found to be contaminated by mould formations and much larger quantities of West African yams entered the market than had been experienced in the preceding year, and a number of them had to be rejected because of mould or perished conditions which arose during transit due to packing and storage methods. It is likely that following investigations, better arrangements within the trade will be made to overcome these difficulties and it is expected that these commodities will be imported in increasing amounts during the next few years.

A total of 339 complaints were received during the year from members of the public and each complaint was thoroughly investigated to the satisfaction of the complainant. There were, in addition, 486 visits made to Corporation premises for the purposes of inspecting the food supplied under contract to the Central Purchasing Committee. In addition, there were 85 visits made to food stores and kitchens of hospitals in the area.

Investigation  
on behalf of  
the general  
public and  
the central  
purchasing  
department  
of the  
Corporation

During the year, meat inspection continued at a steady rate at both Stanley Abattoir and at the private abattoir at Woolton. Once again it is satisfactory to report that 100 per cent meat inspection was maintained on all carcasses at the time of slaughtering and dressing.

Meat  
Inspection

There was a dramatic increase in the number of pig carcasses condemned during the year to 1,052 compared with 501 in the previous year. This increase was almost entirely due to condemnation due to swine fever infected pigs and contacts. It will be remembered that during 1962 almost the entire country was under swine fever restrictions from time to time following one of the largest outbreaks in history.

It is also interesting to note that during the year there was an increasing number of pig carcasses which on inspection showed abscessed conditions clearly due to inoculation in the shoulder and flanks. In one instance, the steel needle used had broken off and was embedded in the leg muscle. This shows the need for great care in sterilisation and cleanliness during inoculation of such animals.



### Tuberculosis eradication measures

It is most satisfactory to report a marked reduction in the number of cow and bullock carcasses which had to be rejected totally because of tuberculin infection. During the year seven cows and eleven bullocks came into this category compared with twelve cows and 32 bullocks in 1961. This improvement gives a clear indication of the reduction in the amount of tuberculin infection in cattle in the country, following the most successful introduction of the tuberculin tested herd schemes.

### Private Abattoir Woolton

During 1962 the private abattoir at Woolton was designated as a bacon factory under the Ministry of Agriculture, Fisheries and Food scheme for quality bacon production. Top grade pigs of selected weight purchased on contract from special breeders are humanely slaughtered, dressed and specially ringed here.

The meat inspection staff maintained complete supervision on all methods used at this factory and critical inspection by the meat inspection staff at all stages from reception of the live pig until final dispatch of the cured bacon has resulted in the production of a quality commodity. This change will necessitate an increased amount of food inspection at this abattoir.

### Slaughter- house Hygiene Regulations 1958

These regulations have come into force by stages since 1959 and are designed to secure hygienic conditions in the slaughter of animals, handling of meat, cleanliness of operators and satisfactory conditions in regard to structure, lighting, drainage and general operation of all slaughterhouses. During the year, perhaps the most difficult problem of all, the removal of bovine stomachs intact and unopened, from slaughter bays was tackled. This had proved to be a very difficult problem and full description is given in the text of the report on the experiments carried out, in conjunction with officials of the Ministry of Agriculture, Fisheries and Food. A temporary walling off process was devised which will satisfactorily deal with the problem in a short term way, although the final solution will only be achieved by the introduction of a cattle line—slaughter layout to replace the present booth system which has served for the past 32 years.

### Adulteration of Food Supplies

The regular sampling work undertaken by public health inspectors has continued throughout the year on a similar basis to that of previous years. Of the 3,958 samples of food and drugs taken or purchased, 174 or 4.3 per cent were found not to be genuine or otherwise irregular. This represents an increase on the last year's figure which was 3.8 per cent, and emphasises

the need for constant vigilance in sampling to maintain high standards. Statutory action was taken in respect of milk, dried soup powder and fish cakes during the year, and fines totalling £147 were imposed.

During the year a total of 363 ice cream supplies were examined bacteriologically, and of these, 304 were found to be completely satisfactory bacteriologically. In instances of unsatisfactory bacteriological results, thorough examination of processing plant and investigation into all possible sources of contamination have been carried out with subsequent raising of standards. Ice cream supplies

Full details are given in the annual report of the supervision of milk supplies including bacteriological testing, and the sampling of supplies of all types including those supplied to the general public, to hospitals and aged persons' hostels, schools, day nurseries and school canteens. Generally the results were most satisfactory. Supervision of milk supplies

The whole of the City is a specified area in which only heat treated or raw milk of tuberculin tested designation may legally be sold to the public and a small percentage of the daily consumption consists of this raw milk. 184 samples of tuberculin tested milk were taken during 1962 and 130 were specially tested for brucella abortus infection. These samples were taken from milk produced within the City area and from farm bottled milk from outside areas. The milk from one herd outside the City area was infected with brucella abortus. Immediate measures were taken to have this milk pasteurised and this treatment continued until the herd was cleared by the veterinary authority.

During the year, 674 visits were made by public health inspectors to pasteurising plants for the purpose of sampling supplies when these installations were in operation. Special attention was paid to the temperature, records and the functioning of the indicator and recording instruments.

The special survey, which was started last year into conditions in food premises and particularly in the distributive food trade and street trading, continued during the year. In respect of food premises of all classes of trade and size, it was found that the problem which required the greatest attention was that of day to day cleaning, specially of the storerooms, passages, staircases and basements. Frequently this problem is associated with inadequate storage space for stock and returnable containers and the untidy arrangements of goods, partly due to the hasty removal of commodities from their containers as sales reduce the displays in shops. Food Hygiene



The problem is made even worse by staffing difficulties which are not always those of numerical insufficiency, but rather of low standards of staff. These standards are improving with training and fortunately this personnel problem is being somewhat offset by the ever widening development of the pre-packaging of foods, and the advent of the self-service shop and the supermarket has introduced new methods of merchandising which have helped to improve the standard of hygiene. During the year, 34,604 visits were made to retail food shops, cafes, bakehouses, licensed premises, food factories, street traders, etc., and 6,125 infringements were dealt with in respect of these premises and traders.

#### Street Trading

The supervision of this class of trader is rendered difficult by the fact that there are few restrictions whereby some measure of control can be exercised. These traders are not subject to the trading hours fixed by the Shops Act, and by the nature of the trade can move from district to district without prior permission or by agreement with various authorities concerned. However, every effort has been made to locate and inspect these vehicles and to enforce the requirements of the Food Hygiene Regulations and Food and Drugs Act, 1955. During the year a total of 559 inspections of mobile shops, barrows and hotdog stalls have been made and 445 infringements dealt with either by warning letter or by legal proceedings. 51 informations were laid against street traders and fines totalling £145 were imposed for various offences including dirty and defective vehicles, sale of unsound food, personnel smoking while handling open food, failure to maintain an adequate supply of water, both hot and cold, and failure to maintain and provide adequate supplies of soap and clean towels. This action has produced a marked improvement in the standard of hygiene of many vehicles.

#### Delivery of Bread and Confectionery

The conveyance of bread and confectionery from bakehouses to retail shops has exercised the concern of the department during the year owing to the likelihood of this food being contaminated with dust or dirt unless precautions are taken to avoid this at all stages between the factory and the consumer. Special attention in 1962 has been given by the inspectors to this aspect of food distribution and cautionary letters are invariably sent to firms on occasions when unsatisfactory conditions have been observed.

In a similar way problems have arisen during the year in regard to the cleanliness of the transfer of meat. Generally this is quite satisfactory in large wholesale buyers who have special vans in which the meat is protected. There is, however, an urgent need for considerable improvement in the

manner in which small quantities of meat and offal are conveyed in cars or hooting brakes by small retailers and caterers. The general practice is to use removable deep aluminium trays which can be a satisfactory method, but when attempts are made to move too much meat the risk of contamination of the meat by dust, dirt and grease can arise and action is necessary. It is clear that special vans should be used wherever possible and that private cars are never a satisfactory means of conveyance.

The disinfection and disinfestation services continued to function as in former years with a slight decline in the services required for disinfection following infectious disease in the City and the Port, but increase in the disinfestation treatment of verminous premises.

In this year's annual report a new heading of transport and ancillary services section is given for the first time. This deals with the increasing work undertaken in transport of miscellaneous services such as meals on wheels in which 63,767 visits were made, home nursing equipment for which 1,056 visits were made, and the incontinent laundry service for which 16,900 calls were made during the year. In addition, there is the transport work connected with the food and general store delivery, and the delivery of poliomyelitis immunisation vaccines, particularly during the third stage of the poliomyelitis campaign in March, 1962, as well as many miscellaneous duties such as the removal and collection of furniture and equipment from aged persons' homes.

Arrangements have continued during the year by which the Medical Officer of Health, the Deputy Medical Officer of Health and the Principal Medical Officer (Mental Health) have acted as medical referees to the crematorium. During the year the number of cremations carried out rose very slightly by just over one per cent to 3,447 which is the highest figure ever undertaken in Liverpool.

As in former years every member of the staff has worked hard and given me loyal support in all our undertakings. For the Chief Officer of a large and varied department this loyalty is the greatest source of satisfaction. I wish to thank all members of the staff for their efforts, and in particular their extra effort with the third poliomyelitis vaccine campaign. I never heard a single grumble.



I wish to acknowledge the help given during the year by Alderman G. F. Catlin who was the chairman, and Councillor A. McKie Reid who was the deputy-chairman. I am also pleased to acknowledge and thank all the members of the Health Committee, particularly the Chairmen of the Sub-Committees, for the kindness and courtesy with which they have considered the reports and recommendations made to them during the year.

I am,

Your obedient servant,

*Andrew B. Semple*

*Medical Officer of Health*

# CITY OF LIVERPOOL

## SUMMARY

OF

## VITAL STATISTICS FOR 1962

Area (land and inland water) ... ..	27,818 Acres
Population (Estimated by Registrar-General) ... ..	745,230
Deaths (all causes) ... ..	9,162
Death rate per 1,000 population ... ..	12·3
Live Births ... ..	16,479
Live Birth rate per 1,000 population ... ..	22·1
Percentage of illegitimate live births ... ..	6·2
Stillbirths ... ..	333
Stillbirth rate per 1,000 total (live and still) births ... ..	19·8
Total Births ... ..	16,812
Infant Deaths (under one year) ... ..	461
Infant Mortality rate per 1,000 live births ... ..	27·97
„ „ „ „ 1,000 legitimate births ... ..	27·56
„ „ „ „ 1,000 illegitimate births ... ..	34·31
Neo-natal Mortality rate (First four weeks) per 1,000 related live births ... ..	18·0
Early Neo-natal Mortality rate (First week) per 1,000 related live births ... ..	16·0
Perinatal Mortality rate (stillbirths+deaths during first week) per 1,000 total live and stillbirths ... ..	35·45
Maternal Deaths ... ..	5
Maternal Mortality rate per 1,000 total births ... ..	0·30
Deaths from:—Pulmonary Tuberculosis ... ..	74
Death rate ... ..	0·099
Non-pulmonary Tuberculosis ... ..	7
Death rate ... ..	0·009
Respiratory Diseases ... ..	1,774
Death rate ... ..	2·4
Cancer (all forms) ... ..	1,719
Death rate ... ..	2·3



## VITAL STATISTICS.

### Statistical Appendix

The majority of the lengthy statistical tables are included in a special appendix at the back of this report. A list of these tables is given on pages v-vi of the preface.

### *Births.*

#### Birth Rate

During the year, 16,479 live births were registered within the City which represents a birth rate of 22·1 per 1,000 of the estimated mid-year population. 8,535 of these births were male and 7,944 were female. 6·2 per cent of the total live births (1,020 births) were illegitimate live births. These figures show no change in the birth rate for the year compared with 1961. There has been an increase in the percentage of illegitimate births, which is higher than it has been for sixteen years. The birth rate within the City continued to be considerably higher than the average for England and Wales, which, for the year, was 18·0 per 1,000. The variation in births and stillbirths from 1938 to 1962 inclusive is given in the graph on the page facing.

### *Stillbirths.*

#### Stillbirth Rate

There were 333 stillbirths registered in the City during the year, representing a stillbirth rate of 19·8 per 1,000. This is the lowest figure ever recorded for the City. The stillbirth rate among legitimate babies was 19·9 and among illegitimate babies was 18·3 per 1,000.

### *Mortality.*

#### General Death Rate

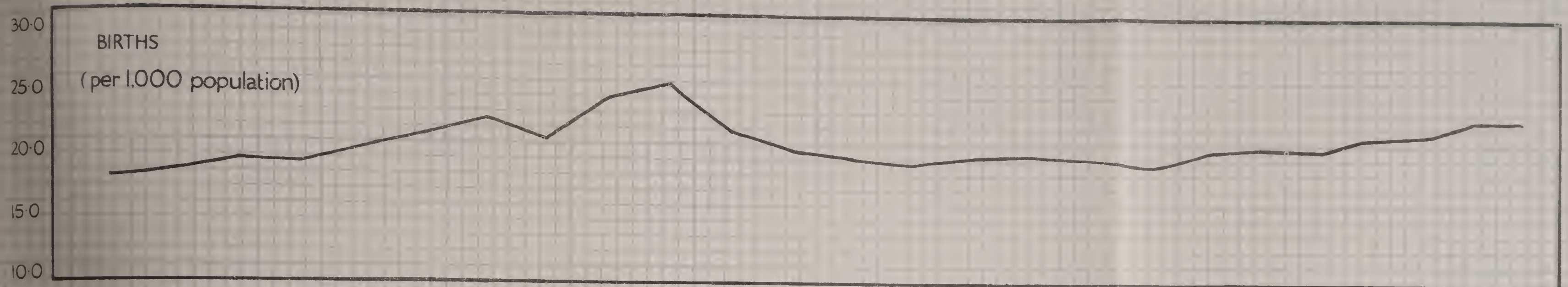
There were 9,162 deaths registered within the City during the year, 4,606 males and 4,556 females. This gives a general death rate of 12·3 per 1,000 as compared with a death rate of 12·4 for the preceding year. The number of deaths from cancer of the lung was 484. Deaths from tuberculosis during the year were 81 as compared with 86 in the previous year.

The trends of mortality of all causes and certain specified diseases have been prepared and are produced on the accompanying graphs. The full details of the causes of mortality are given in the statistical appendix.

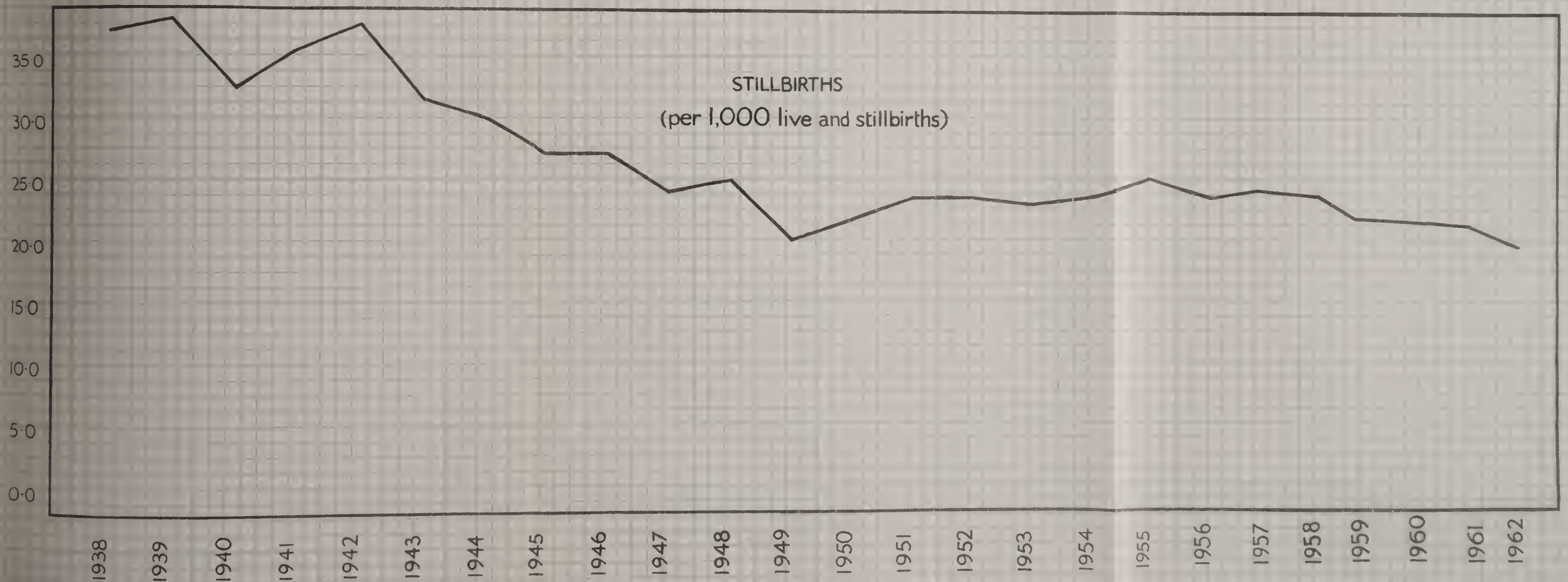


# CITY OF LIVERPOOL

## BIRTHS - 1938 - 1962

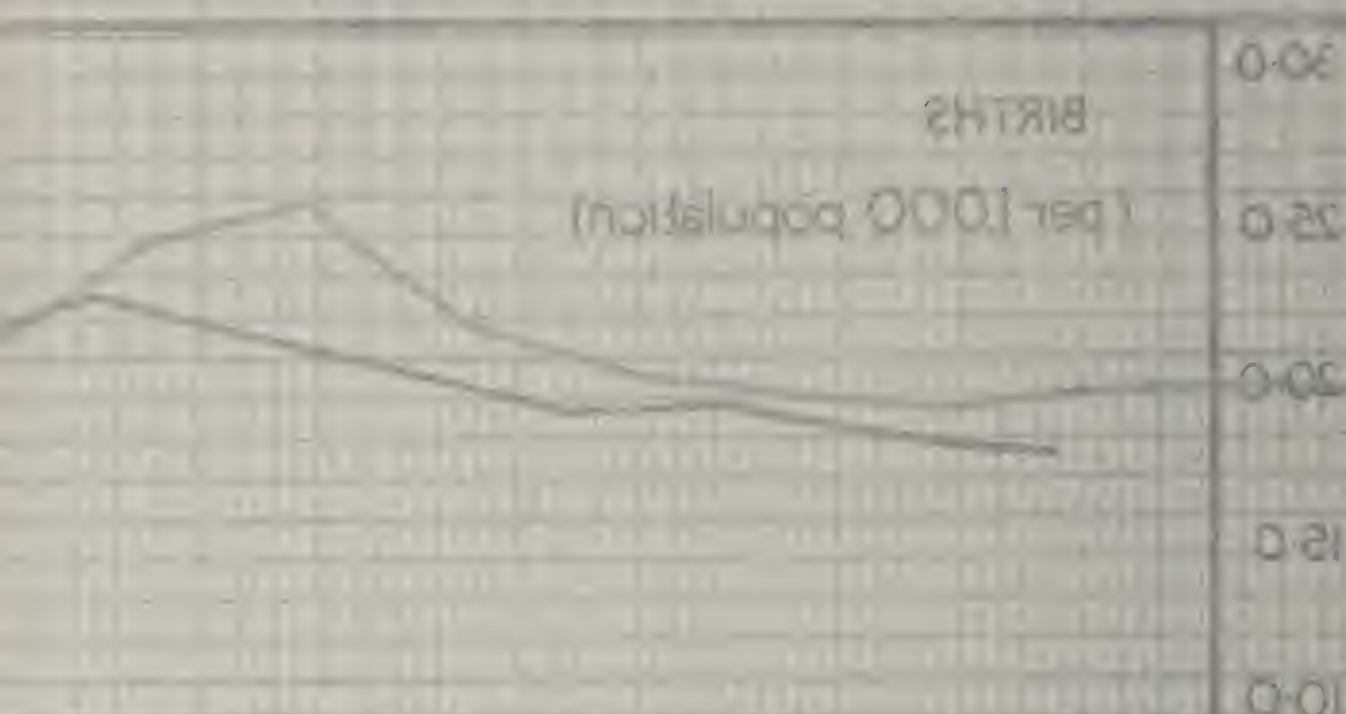


## STILLBIRTHS - 1938 - 1962





1918-1938 - 1967



1941-1967



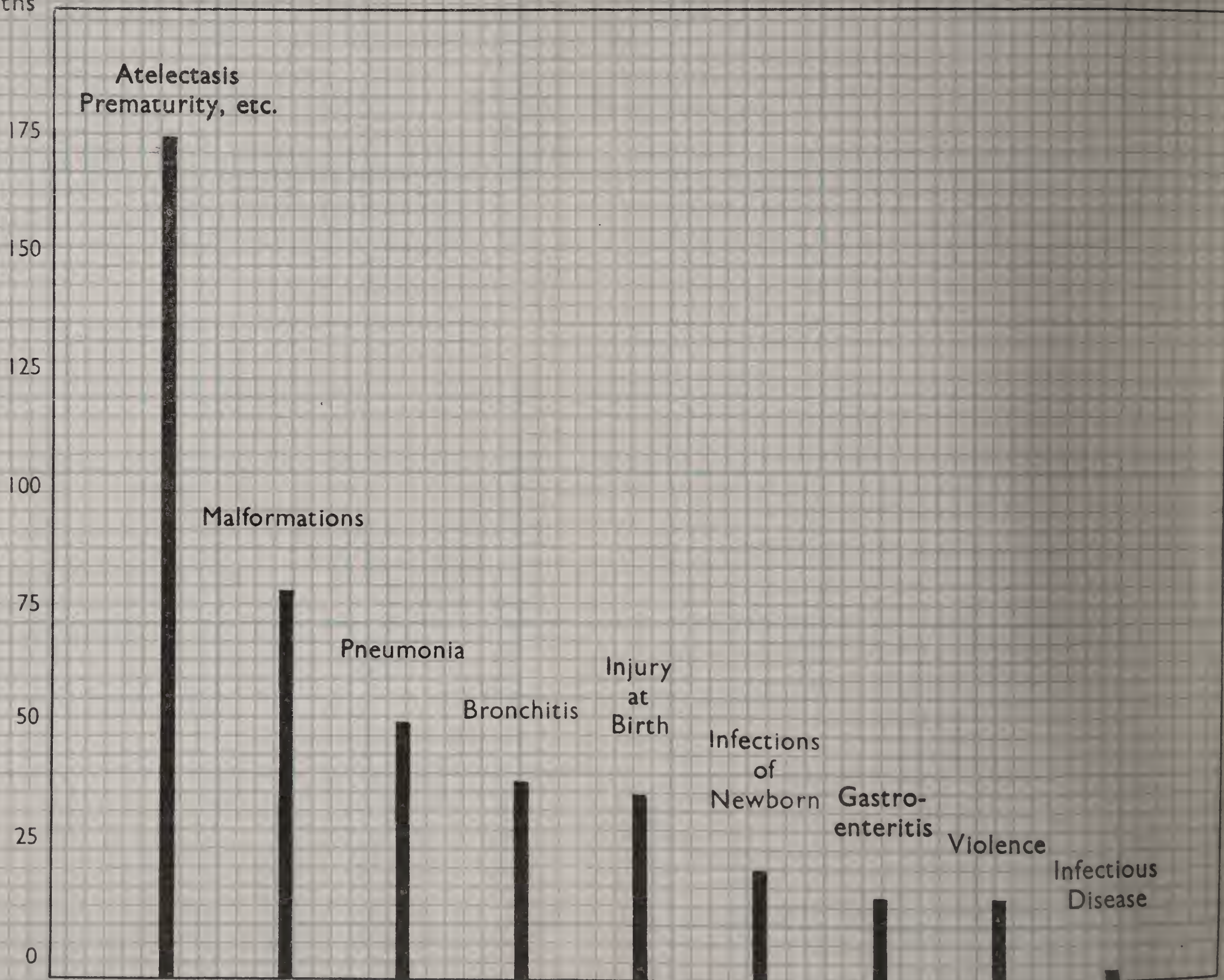




# CITY OF LIVERPOOL

## PRINCIPAL CAUSES OF INFANT MORTALITY — 1962

Total  
Deaths

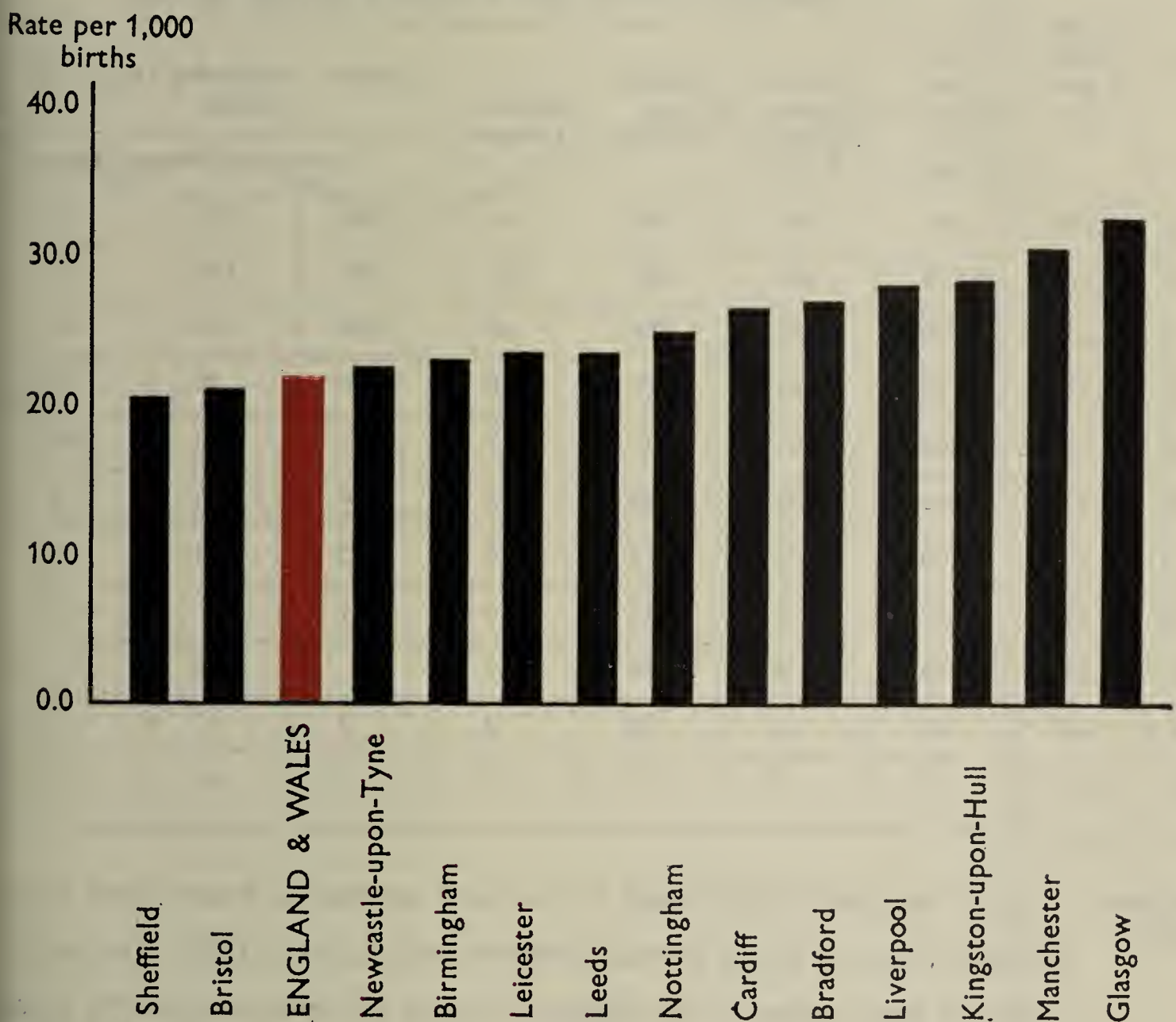




### *Infant Mortality.*

The infant mortality rate fell very slightly during the year to 28.0 per 1,000 live births. A total number of 461 infant deaths occurred, of which 35 were illegitimate children. This represents an illegitimate infant mortality rate of 34.3 compared with a legitimate mortality rate of 27.6. The principal causes of infant mortality are represented in a graph facing this page, and complete causes are given in the statistical tables in the appendix at the back of this report.

CHART SHOWING INFANT MORTALITY RATE FOR A NUMBER OF THE LARGER AUTHORITIES FOR THE YEAR 1962



### *Perinatal Mortality.*

This rate, which is the number of stillbirths and the number of deaths in infants under one week per 1,000 births is being increasingly used in statistics and it represents more fairly the hazards of childbirth. During 1962 the rate was 35.45 compared with 38.29 in 1961. The reduction is due largely to the substantial fall in stillbirths.



*Child Mortality.***Child  
Mortality  
Rate**

The various causes of child mortality, both in total and for specific diseases, are given in the table illustrated below. It will be seen that deaths from 1 year to 5 years of age rose from 51 to 61 in 1962, this is due to an increase in deaths by violent causes, which rose from 11 in 1961 to 22 in 1962.

YEARLY AVERAGE NUMBER OF DEATHS IN SUCCESSIVE QUINQUENNIA, 1920-1959, AND  
TOTAL DEATHS IN THE YEARS 1960, 1961 AND 1962

Year	Deaths under 1 year of age	DEATHS, 1 YEAR AND UNDER 5 YEARS OF AGE							
		Total, 1 year and under 5 years of age	General Diseases (including T.B.).	Respira- tory Diseases	Digestive Diseases	Measles	Whooping Cough	Diphtheria	Scar- let Fev.
						Included in General Diseases			
1920-24	2,278	1,349	557	513	121	202	109	62	
1925-29	1,879	1,252	564	461	121	227	118	61	
1930-34	1,601	890	456	278	63	200	72	79	
1935-39	1,283	487	243	147	30	79	46	58	
1940-44	1,140	366	160	94	17	27	23	45	
1945-49	1,100	168	67	36	13	8	15	9	
1950-54	553	100	26	22	5	2	4	—	
1955-59	432	57	7	12	5	1	—	—	
1960	451	54	4	14	5	—	2	—	
1961	467	51	4	10	4	1	—	—	
1962	461	61	2	10	2	2	—	—	

**Deaths from  
Cancer**

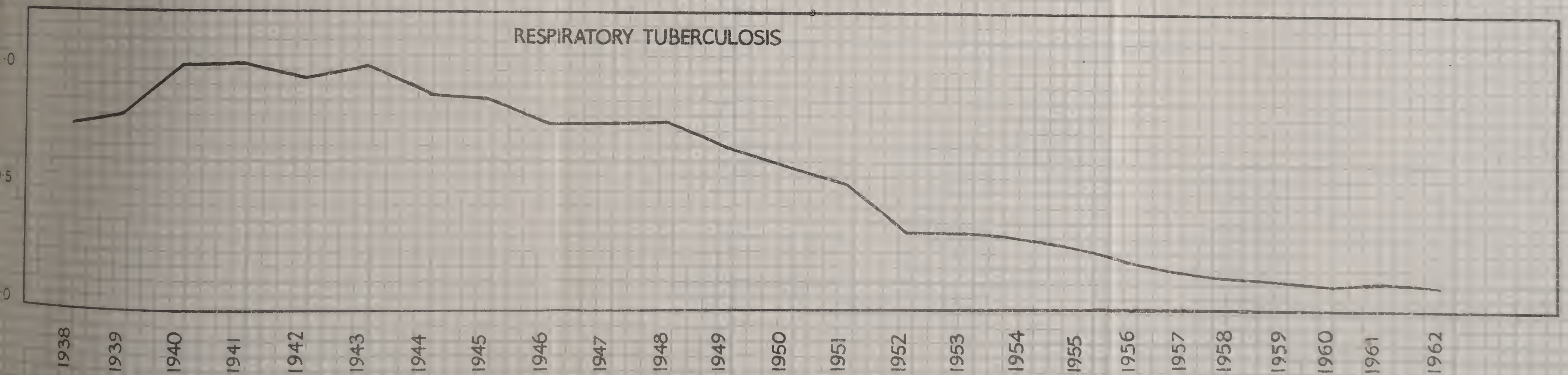
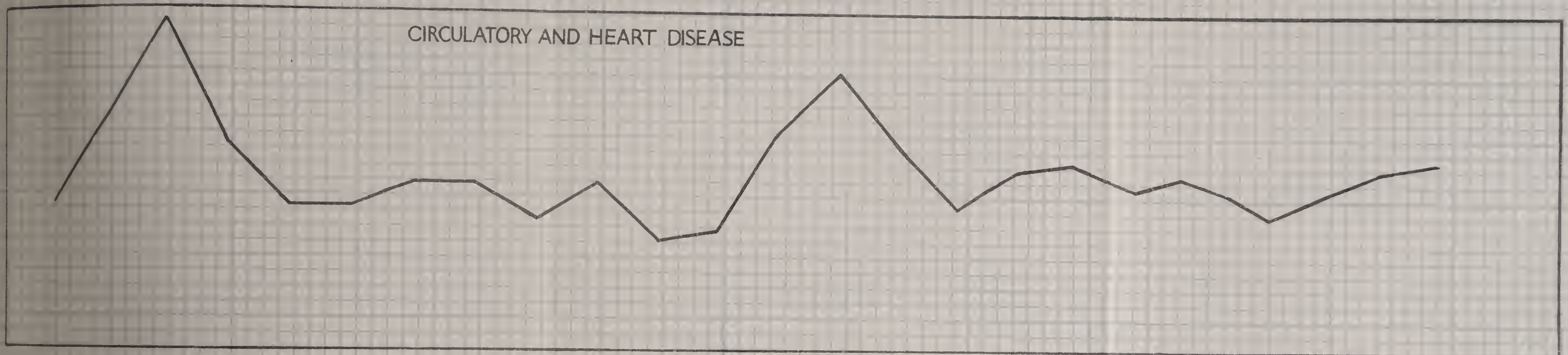
There has been little change in the total number of deaths from cancer during the year, 1,719 in 1962 as compared with 1,708 in 1961. The number of deaths from cancer of the respiratory tract fell from 525 in 1961 to 484 in 1962 (Table 4).



# TRENDS OF MORTALITY-LIVERPOOL

1938 — 1962

Death rate per 1,000 population





TRENDS OF MORTALITY

1938-1941

Deaths per 1000

HEART DISEASE



NEW TUBERCULOSIS



1938 1939 1940 1941

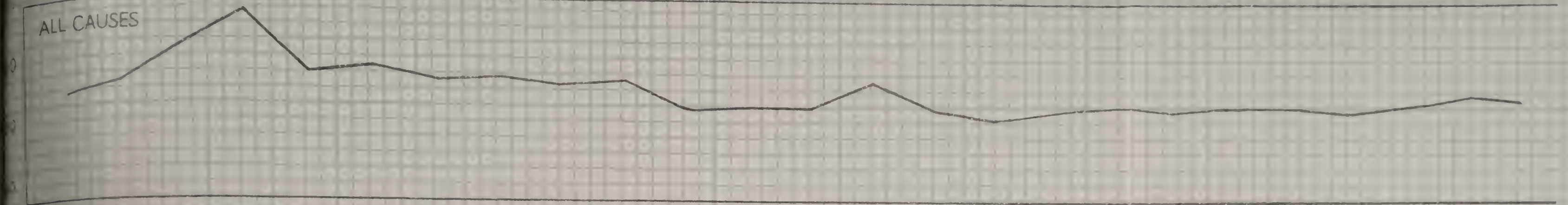


# TRENDS OF MORTALITY - LIVERPOOL

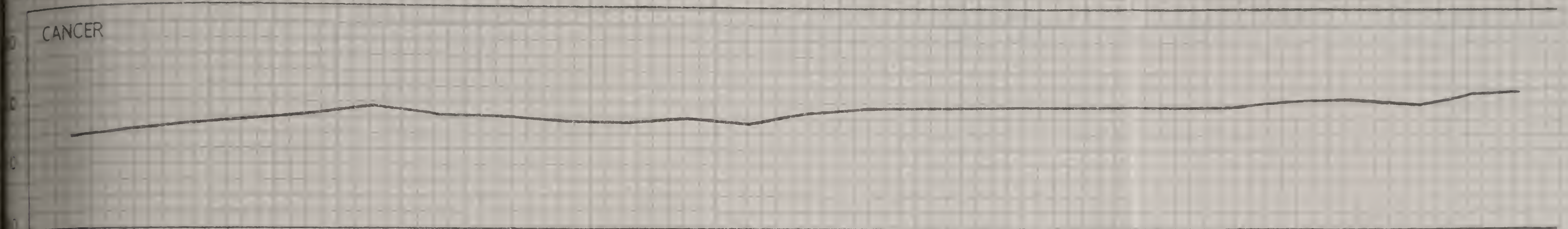
1938 — 1962

Death rate per 1,000 population

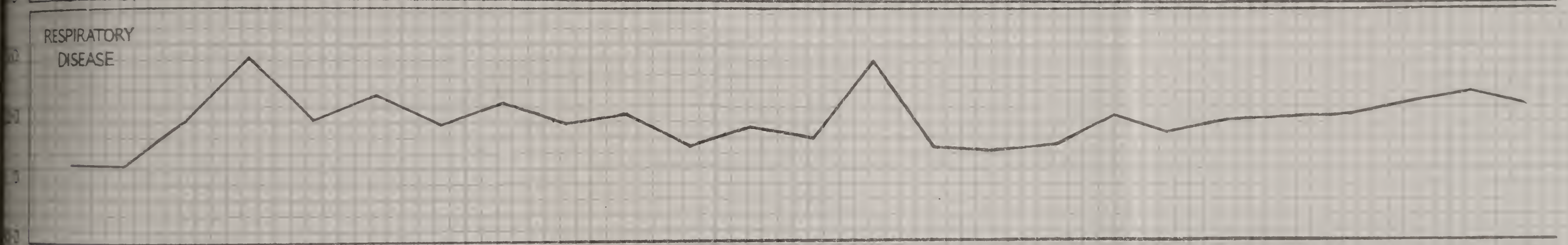
ALL CAUSES



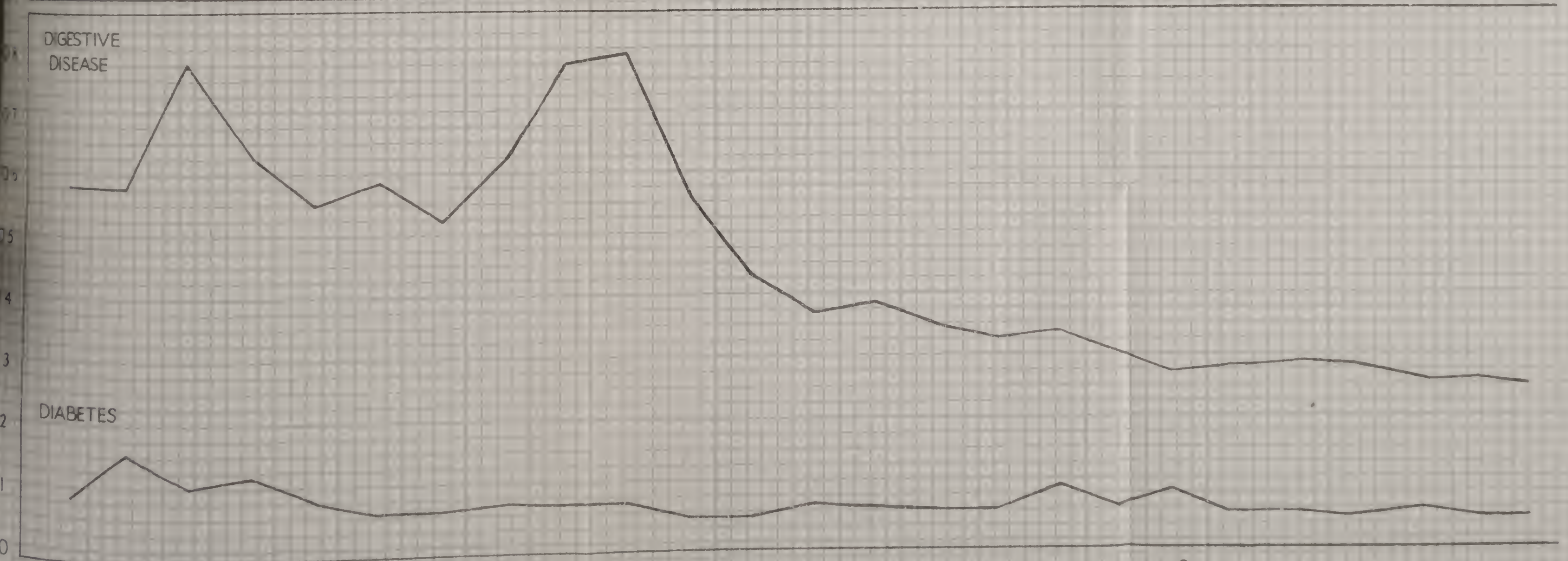
CANCER



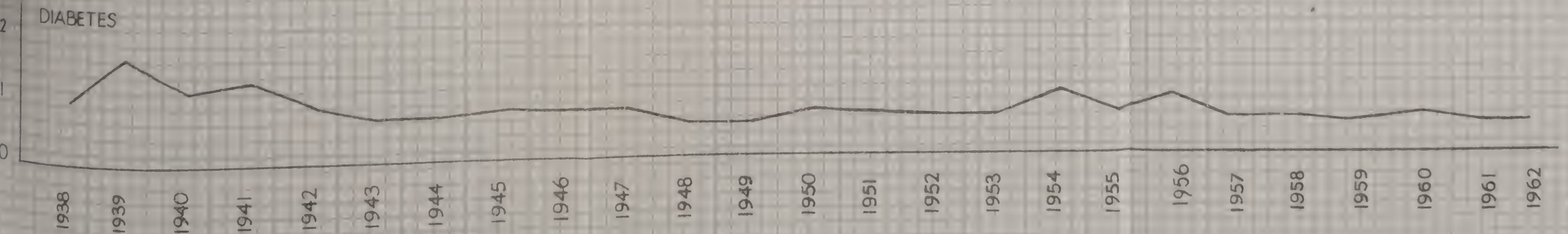
RESPIRATORY DISEASE



DIGESTIVE DISEASE



DIABETES





THE END OF THE WORLD

1938

1938





# TRENDS OF MORTALITY—LIVERPOOL

1938 — 1962

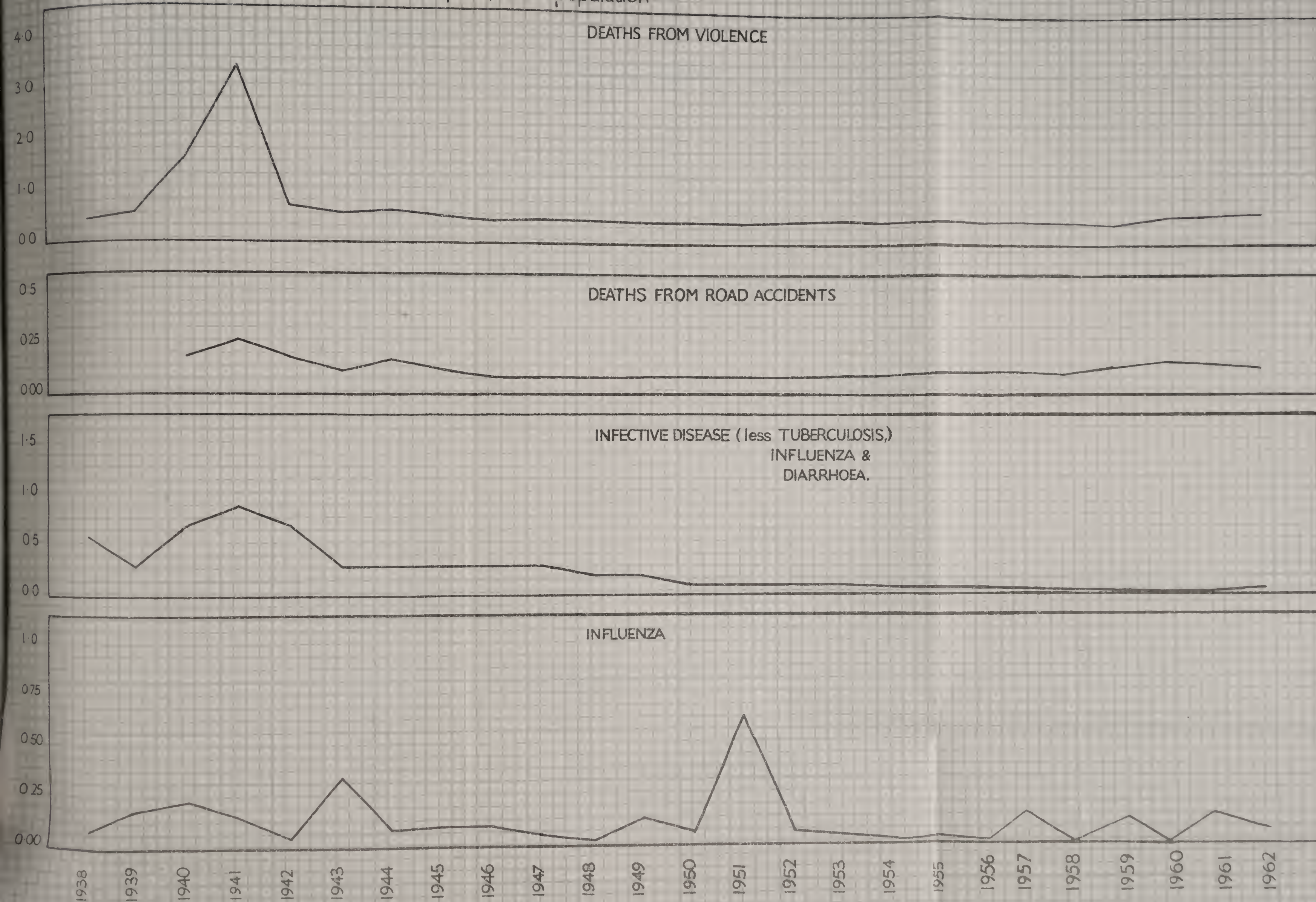
Death rate per 1,000 population

DEATHS FROM VIOLENCE

DEATHS FROM ROAD ACCIDENTS

INFECTIVE DISEASE (less TUBERCULOSIS,  
INFLUENZA &  
DIARRHOEA.

INFLUENZA





859102

1951-1952

DEATHS FROM TYPHOID



DEATHS FROM ROAD ACCIDENTS



INFLUENZA & PAROTITIS SURVIVORS





# TRENDS OF MORTALITY-LIVERPOOL

1945 - 1962

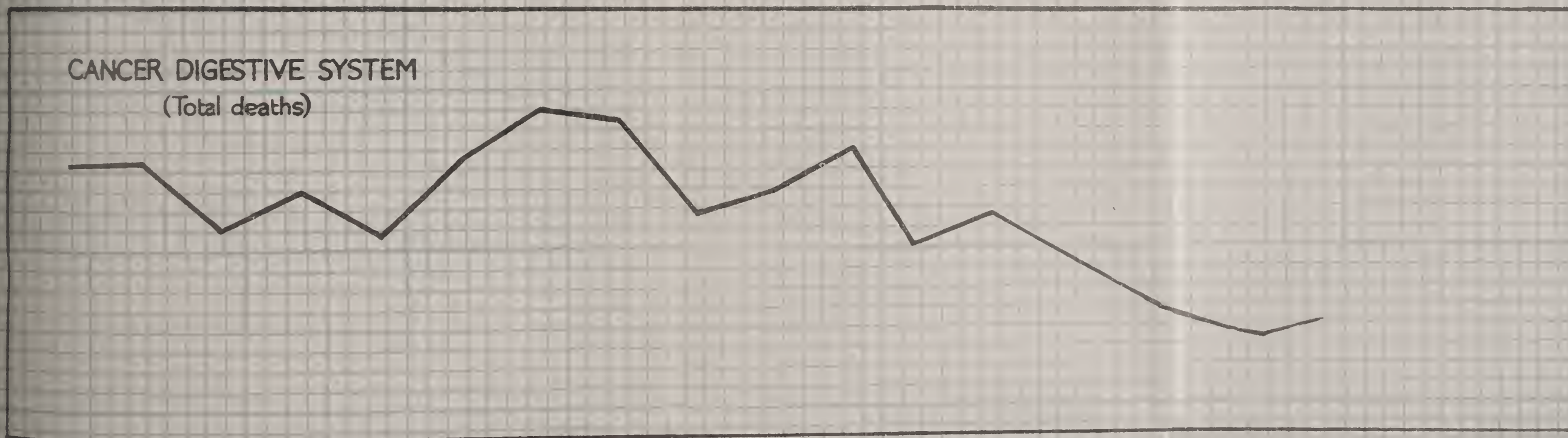
CANCER RESPIRATORY SYSTEM  
(Total deaths)

500  
450  
400  
350  
300  
250  
200  
150



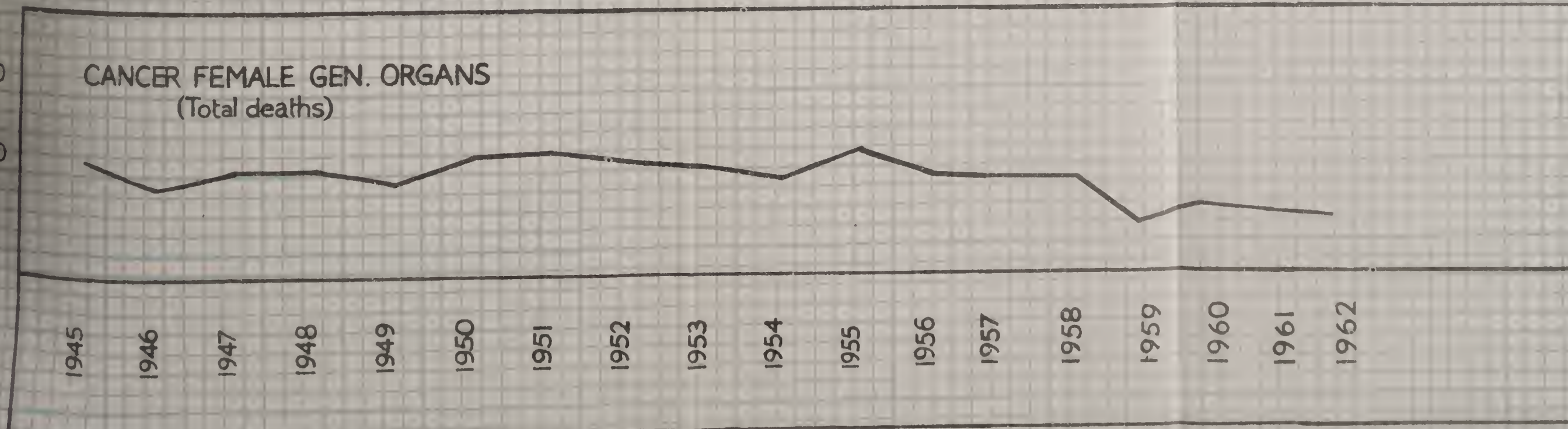
CANCER DIGESTIVE SYSTEM  
(Total deaths)

700  
650  
600  
550



CANCER FEMALE GEN. ORGANS  
(Total deaths)

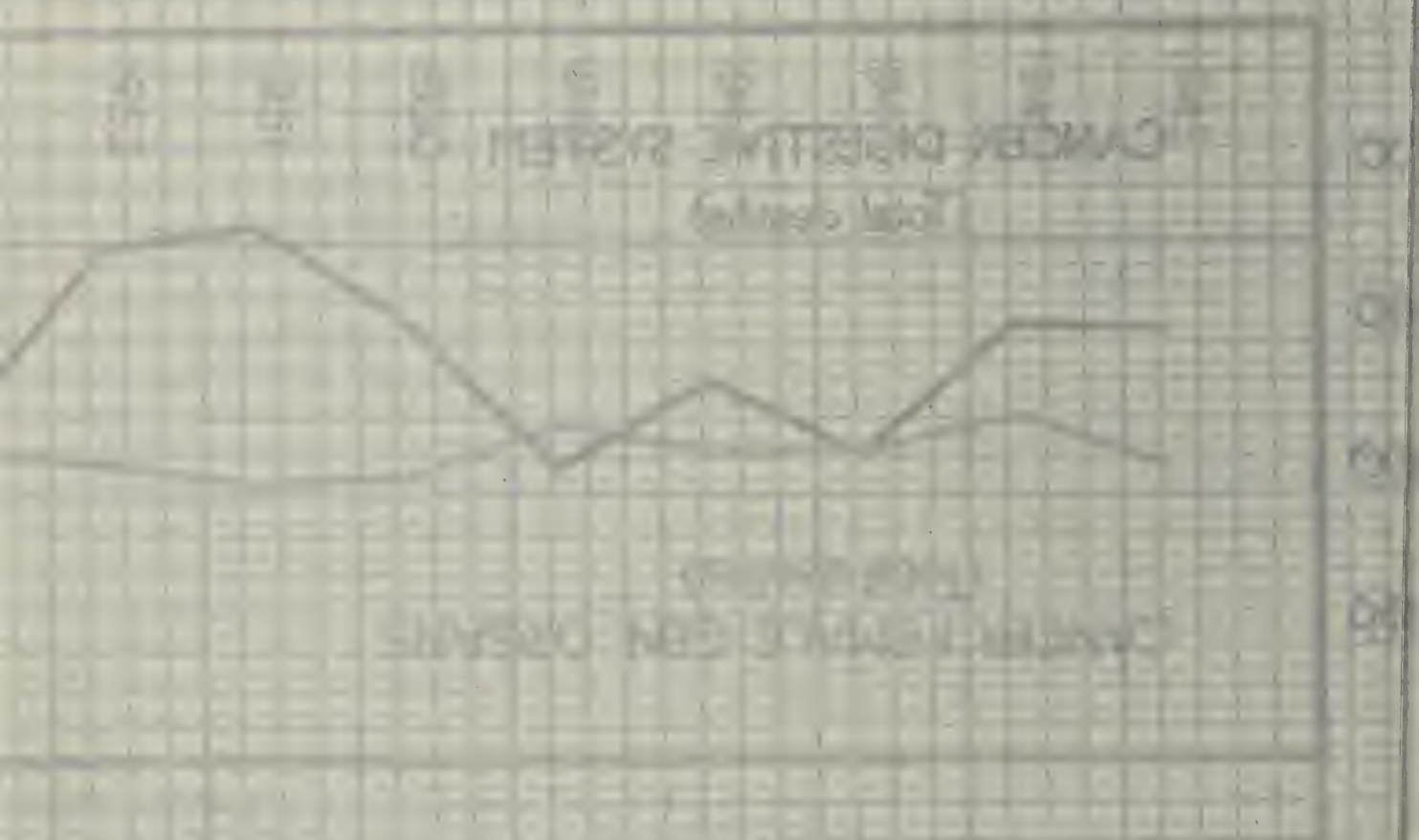
150  
100  
50





# TRENDS OF MORTALITY

1948 - 1952



## MIDWIFERY SERVICE

During the year, 328 midwives notified their intention to practise **Staff** midwifery in the city. This is fewer than last year when 347 midwives notified, but at the end of the year 290 were still practising.

The number of domiciliary births was 4,768 compared with 4,936 last year. The percentage of home births was 23.8.

The number of hospital births increased to 74 per cent while 2.2 per cent were born in nursing homes. Although the number of babies born in hospitals increased, many mothers and babies were discharged during the lying-in period and very few stayed in for the full ten days.

Altogether, 2,691 mothers and babies who were discharged before the tenth day were cared for by midwives after their return home. Many more who left hospital between eight and ten days after confinement were visited early by the health visitors.

A table is given which shows how discharge from hospital, which originally took place on the tenth day, is now occurring earlier in the puerperium. This situation has arisen because more women were delivered in hospital, while the number of hospital beds remained the same. The hospital staff notified the health department and arrangements were made for the patients and their babies to be visited for the remainder of the lying-in period by the appropriate midwife. Although the domiciliary midwives co-operated well in this scheme, it was by no means ideal. There was an increased nursing load for each midwife, and it was impossible in every case to build up the relationship so necessary in domiciliary midwifery practice.

Other problems were raised by this system of early discharge. Some mothers thought that because they were discharged from hospital they were fit to do all their work and go out to shop or visit. Others who, while in hospital, were anxious to return home, found that they did not feel ready to manage their household together with a newly born baby. During the cold weather the patients left a centrally heated ward and went home to



unheated rooms, or if there was a fire in the day-time it was allowed to go out at night. This cold could affect very young babies.

**Medical Aid** The midwives called in medical aid for 1,399 cases for different abnormalities. In 1,248 cases a doctor had been booked for confinement (Table 11).

**Puerperal Pyrexia** During 1962 there were 489 cases of puerperal pyrexia; of these, 472 occurred in hospital, two in nursing homes and fifteen in the patients' homes. (Table 10).

**Staff** The midwifery staff at the end of the year consisted of a non-medical supervisor of midwives, two assistant supervisors and 59 full-time midwives, three of whom cared for premature babies. Owing to the increase in full-time staff there was no further need to recruit part-time midwives. Of the six part-time staff who had helped during the year, two transferred to the district nursing service, two went to work in hospital and two left the district.

Seven full-time staff left during the year, four for domestic reasons, one to work abroad, one returned to hospital and one died.

Sixteen midwives joined the staff, six of our own trainees, eight from the hospitals and two former midwives returned.

The staff situation improved considerably during the year, and it is hoped that, in the near future, it will be possible to implement the recommendation that a single-handed midwife should deliver 60 cases per year and a training midwife, with a pupil, 90 cases per year. During 1962, 985 days were lost by full-time staff and 340 days by part-time staff through sickness and maternity leave.

**Accommodation** Thirty-six midwives occupied 33 corporation houses or flats and eight unmarried midwives lived in furnished accommodation. From time to time also one or two midwives occupied rooms at the district nurses' hostel at 1, Church Road, Walton, while awaiting the allocation of corporation houses or flats.

Twenty-nine midwives were car-owners and drivers. This helped to **Transport** provide a more efficient service as the midwife can reach her patient promptly. The non-medical supervisor and the senior assistant supervisor used their cars for supervisory and practical teaching duties. Nineteen midwives were cyclists and eleven used public transport. The taxi service to transport these two latter categories to confinements was of great assistance as the amount of equipment now necessary can no longer be carried by a single midwife, consisting as it does of a delivery case, an analgesic machine, an oxygen set, an equipment bag containing a sphygmomanometer and a stethoscope.

Last year midwives commenced to use trilene analgesia as well as, or as **Equipment** an alternative to, gas and air for the relief of pain in labour, and in 1962 the number of machines was increased to eleven. These were used chiefly by the teaching midwives, as it is necessary to instruct pupil midwives in the use of the machine.

In order to reduce to a minimum the risk of cross-infection, disposable items of equipment were used. The midwives now have disposable caps, towels and face masks. Masks and towels are used once and then burnt and the caps used to cover the midwife's head at the confinement are kept in the house and used as long as the mother and baby need attention, and then discarded.

Ante-natal care of the mother was carried out at 31 general practitioners' **Ante-Natal Care** clinics, at all local authority clinics and at seventeen midwives' clinics, also by visits to the patients' homes. Midwives attended 1,029 sessions at general practitioners' surgeries and 667 at medical officers' clinics. Midwives' clinics were staffed by them on 1,511 occasions and 22,184 home visits were made.

Doctors were booked under the maternity medical service in 96.7 per cent of cases, but were actually present at 9.7 per cent of all cases.



**Haemoglobin  
Estimations**

This test, which is recommended for all expectant mothers, was carried out through the health department in conjunction with the Regional Hospital Board on 2,078 patients.

**Analgesia**

Gas and air was administered to 3,051 mothers delivered by municipal midwives, and trilene to 106. Liverpool Maternity Hospital district midwives administered gas and air to 997 patients and trilene to five. The total number of patients who received pethidine or pethilorfan was 3,269.

**Domiciliary  
Deliveries**

The total domiciliary deliveries were 4,697, of which 3,529 were delivered by municipal midwives and 1,168 by Liverpool Maternity Hospital district midwives.

**Visits**

The total deliveries were 189 less than last year and the domiciliary midwives delivered 222 less than last year, but this was offset by the number of visits paid to patients discharged early from the maternity hospitals. The midwives carried out 3,444 visits to these patients and 2,258 visits to patients referred from hospitals for the assessment of home conditions. They also paid 54,883 visits to their own patients. The Liverpool Maternity Hospital district midwives also carried out 415 visits to patients discharged early from the Maternity Hospital, and 103 home condition visits. They paid 21,275 nursing visits to their own booked patients.

**Postgraduate  
Courses**

Postgraduate courses were attended by six midwives.

**Training of  
Pupil  
Midwives  
Part II**

The training scheme in conjunction with Sefton General Hospital continued during the year. The pupil midwives worked for three months under the supervision of their district teaching midwives and tutorials were given by the non-medical supervisor. Thirty-nine pupils took the course and all qualified as midwives; six joined the staff.

**Transfusion  
Unit**

The emergency obstetric flying squad was called out on 77 occasions, 76 times for the mother and once to premature twins who required intubation. Fifteen patients were transferred to hospital and 60 were nursed at home. Two cases occurred in nursing homes. Of the 77 patients, four had ante

partum haemorrhage, 25 had post partum haemorrhage, 38 had retained placenta and there was one case of collapse. Blood transfusion was given to 37 mothers. There were two cases of malpresentation, one of impacted shoulders, four deep transverse arrest and one abortion.

The midwives were called to 45 emergencies by the ambulance service. Consultants were called to midwives' cases on 24 occasions, sixteen times to mothers and eight times to babies. Table 13 gives the reason for calling for further advice. Cases booked to midwives, but later transferred to hospital numbered 907 (Table 12).

In October, after meetings between the Ministry of Health, the United **Liverpool** **Maternity** **Hospital** **District** **Homes** Liverpool Hospitals Board and the Town Clerk, it was decided that from 31st March, 1963, the Liverpool Maternity Hospital would not undertake the district training of pupil midwives and that by the date mentioned, their five district homes would close and the local health authority would take over the work in these areas.

Owing to a shortage of trained staff, Eastbourne Street district home closed at the beginning of December. All general practitioners and patients were informed of the change, and the transfer took place smoothly. 82 patients were divided between six midwives in the area, so that on an average, each midwife took one additional patient per week for the five months, December, January, February, March and April.

### **Premature Babies.**

Altogether 160 premature babies were born at home, and of these, 83 were able to remain at home, whilst 594 premature babies who were born in hospital, or were born at home and transferred to hospital, were later discharged to the care of the specially trained midwives. The majority had reached the weight of 4 lb. 6 oz. or over before being discharged, but five weighed between 3 lb. 5 oz. and 4 lb. 6 oz. All premature babies were visited until they weighed over 6 lb. and were making satisfactory progress.



Among the babies born at home there were six sets of twins and among those discharged from hospital there were 43 sets of twins and two sets of triplets.

### Visits

The midwives caring for premature babies made 1,157 visits to home deliveries and 2,949 to babies discharged from hospitals, making a total of 4,106 visits. They also made 150 visits to babies' homes before they were discharged to ascertain if the conditions were suitable for so small an infant.

### Equipment

During the year equipment was loaned as follows:—

Cots	...	...	...	...	7
Blankets	...	...	...	...	15
Hot Water Bottles and Covers	...				69
Gowns	...	...	...	...	25
Scales	...	...	...	...	7
Mattresses	...	...	...	...	2

### Maternal Deaths

During the year there were five maternal deaths:—

Haemorrhage...	...	...	...	1
Obstetric Shock	...	...	...	1
Toxaemia of Pregnancy	...	...		1
Air Embolism due to attempted abortion	...	...	...	2

### Haemorrhage

The death from haemorrhage occurred in a woman of 32 in her seventh pregnancy. She had a bad obstetric history, with rhesus negative blood and recurring antibodies. She had had ante partum haemorrhages requiring blood transfusion in two previous pregnancies and had a threatened miscarriage at the fourteenth week of the present pregnancy. Sterilization (tubal ligation) had been discussed after her last pregnancy, but had been refused.

She had been admitted to hospital for one week at the fourteenth week with a threatened miscarriage and was only eighteen weeks pregnant when she collapsed suddenly at 7.30 a.m. after her husband had left for work. A neighbour obtained an ambulance and the patient was transferred to

hospital, but was dead on arrival. A post mortem showed that there had been a sudden massive haemorrhage with partial separation of the placenta. This was an unusual case of placenta separation as early as the eighteenth week of pregnancy.

Obstetric shock was the cause of death in a woman aged 31 in her seventh pregnancy. In the last four weeks of pregnancy she developed a raised blood pressure and albuminuria and was admitted to hospital for treatment. Labour was induced at term and two hours after the onset of labour, she became unconscious for one minute. This may have been an eclamptic fit. After a labour of two hours ten minutes she was delivered normally of a fresh stillborn infant. The patient suddenly collapsed one hour later; the blood pressure fell and in spite of blood transfusion, intra tracheal oxygen and direct cardiac massage, she died. **Obstetric Shock**

One death from toxæmia occurred in a patient bearing her eighth child. Toxæmia This was an unusual case, as toxæmia developed at an early stage of pregnancy. There had been continued bleeding from the eleventh week of pregnancy and the patient was admitted to hospital, two weeks later, when she had an attack of cardiac failure with oedema and albuminuria and a high blood urea. It was found that there was a hydatidiform degeneration of the pregnancy, and a total hysterectomy was performed. Following the operation the patient developed gross pulmonary oedema, which at first responded to treatment, but two days after the operation she suddenly developed a temperature of 106° F with extreme tachycardia and died suddenly. Post mortem showed a subarachnoid haemorrhage and evidence of toxæmia of pregnancy. **Toxæmia**

There were two deaths from air embolism due to attempted self induced abortion by the introduction of soap and water into the uterus. Both women were married, one in her fourth pregnancy and the other in her second. Both were depressed by the pregnancy, one as her husband was frequently unemployed and the other because she was in debt. In both cases the patient became unconscious and died within a few minutes of introducing soapy water into the uterus. **Air Embolism**

A post mortem in both cases showed that the cerebral vessels and heart contained numerous bubbles of air.



### Associated Maternal Deaths

During the year there were three associated maternal deaths. The first was an elderly multigravida in her third pregnancy. Her last child was born nine years previously. Four years previously there had been one occasion when the patient had an attack of dyspnoea and tachycardia with a blood pressure of 180/110. This episode followed overwork and the patient was not pregnant at the time. Apart from this her general health had been satisfactory. During this pregnancy she was carefully supervised by her general practitioner from early pregnancy and by the hospital where she was booked for delivery. When she was 36 weeks pregnant it was found at the hospital that her blood pressure had suddenly risen to 185/110 and she was advised to enter hospital immediately, but the patient refused. She walked home, a distance of half a mile, and on reaching home collapsed and died undelivered.

The post mortem showed an enlarged heart due to left ventricular hypertrophy with atheroma of the aorta and slight atheroma of coronary artery. There was gross bilateral oedema of lungs with oedema and congestion of brain and congested granular kidneys. The cause of death was acute left ventricular failure and hypertension. The exertion of walking home in a woman whose cardiovascular system was already damaged by hypertension of at least four years' standing was sufficient to cause acute left ventricular failure and pulmonary oedema.

The second death was in a young woman of 23 years in her third pregnancy. Her health was reported as good, but she was of an emotional type and inclined to become easily depressed. She attended her general practitioner frequently and was given antidepressive tablets. At the 28th week of pregnancy she booked a midwife for a home delivery. At the 36th week of pregnancy the patient was well but depressed as her husband, who was a seafarer, had to rejoin his ship. The day after her husband's departure, the patient was found collapsed at home and was transferred to hospital. The same evening she was delivered of a stillborn foetus and died on the following day. Post mortem examination showed a severe pleurisy with considerable pleural exudate and muco purulent bronchitis. The lungs showed numerous confluent broncho pneumonic areas on the left side with almost complete collapse of the right lower lobe. The cause of death was pleurisy due to bronchopneumonia.

The third death was in a primigravida aged 20 years who was seriously ill with bronchiectasis and asthma before her pregnancy. Throughout pregnancy she was constantly under supervision by the consultant chest physician and obstetrician and for a time was admitted to a special chest unit. Her admission to the obstetric unit for rest for the last few weeks of pregnancy was planned, but she delivered prematurely at the 31st week. Neither the pregnancy nor the labour appeared to have a deleterious effect, although her chest condition was troublesome in the puerperium. Because of this she was transferred to a chest hospital as an in-patient on the eighth day. From then on she was in and out of hospital and died approximately three months after delivery. The death was inevitable in this case and the pregnancy was merely an incident in a progressively fatal disease of the lungs. The cause of death was staphylococcal pneumonia and pulmonary sarcoidosis.



## HEALTH VISITING

### Staff

At the end of 1962 the health visiting staff consisted of a superintendent health visitor, two assistant superintendents, 83 health visitors and one full-time S.R.N. The work done by this section of the Health Department is not confined to the supervision of the health of mothers and children under five years of age, but extends to all age groups.

In March, 1962, the last phase of the campaign against poliomyelitis took place. Oral vaccine was used for the first time in Liverpool, and this made it possible for the health visitors to administer the vaccine.

### Visits

During 1962, 15,672 visits were paid to newborn children. These primary visits were made as soon as possible after the mothers and babies were discharged from hospital or from the care of the midwife. At these visits advice on infant care was given, and mothers were encouraged to take advantage of all the services available to them. Visits were also made to children under the age of five years, and 172,762 visits were paid to this group.

As the health visitor has the advantage of a nursing as well as a social training, her advice is sought by many agencies. In 1962 this was evident in the number of reports requested by persons dealing with the sick aged by those assessing the need for rehousing invalids, and by the number of contacts made by the health visitors with other social agencies.

### Visits to Elderly

Over 4,000 visits were made to elderly sick people living alone; 503 of these in response to a request from a consultant physician at Newsha General Hospital. In some instances, as a result of the report from the health visitor, immediate admission to hospital was arranged, and in other welfare services were made available. The same physician at Newsha General Hospital relied on the health visitor to ensure that suitable arrangements were made for the continued care of patients after their discharge from hospital.

Over 400 reports were submitted to the medical officer responsible for assessing requests for priority housing. The inter-relationship of health and housing is of practical importance to the Health Department, and information supplied by the health visitors was of great value.

Families with special problems continued to be of importance in the work of the health visitor, and in this sphere co-operation with other voluntary and statutory bodies was very necessary. Fifteen hundred communications were made in 1962 with the following:—

Hospital Almoners.

Children's Officer.

N.S.P.C.C.

Education Welfare Department.

National Assistance Board.

Probation Officers.

The two moral welfare associations in the city.

In eight cases, arrangements were made to send mothers and their children to Brentwood rehabilitation centre. One or two months in each instance were spent at the centre learning the rudiments of home management and family care from the warden and her staff. All these families are still visited and it is hoped that the improvement evident at present will continue.

During 1962, 33 mothers with one or two children were sent to convalescent homes run by voluntary associations. Several applications were refused as there was insufficient accommodation.

Twenty-eight older persons went on convalescent holidays during the twelve months, but there was no suitable home for the really aged men and women who required this service.

Co-operation between health visitors and general practitioners increased during the year. Frequent discussions took place at surgeries or clinics on medical and social problems affecting families visited by both doctor and health visitor.

The monthly meetings of health visitors and other welfare visitors at the surgery of one practice in Liverpool continued, and was of great interest and assistance to all who attended.

Two infant welfare clinics were held by general practitioners in the city, and a health visitor attended each of these.

The work done by the health visitors for the consultant at Newsham General Hospital has been mentioned in this report; other hospitals have availed themselves of the services of a health visitor in their work with diabetic patients, epileptic patients, ante natal mothers, and children.

**Problem  
Families**

**Convalescence**

**Co-operation  
with General  
Practitioners**

**Co-operation  
with  
Hospitals**



**Diabetic  
Health  
Visiting**

Three hospitals, the David Lewis Northern, Walton Hospital and Sefton General Hospital were visited by the health visitors responsible for visiting diabetic patients. The consultant physicians expressed their appreciation of the information which the visitors were able to supply, and in many cases this was invaluable.

**Neurological  
Patients**

A health visitor continued to visit the neurological unit at Walton Hospital, and attended special discussions between the hospital staff and patients awaiting discharge from hospital. This health visitor is a member of the Merseyside Epileptic Association, and has received much help and advice from members. Two other health visitors visited Alder Hey Children's Hospital and the Royal Southern Hospital, and spent part of their time in similar work.

**Maternity  
Hospitals**

Seven health visitors continued to visit three of the maternity hospitals in the city to give mothercraft instruction to ante natal patients, and to assist with any social problems.

**Children's  
Hospital**

One health visitor attended Alder Hey Children's Hospital weekly.

### **Maternity and Child Welfare Clinics.**

**Clinic  
Sessions**

The new health centre in Mill Street was opened during the year bringing the total number of clinics in the city to 27 and the number of sessions, ante natal and child welfare, to 310. There was a decline in the attendances at the ante natal clinics and six sessions were therefore discontinued. Midwives' sessions were, however, increased in number, and were well attended. A health visitor attended all these sessions to hold

**Mothercraft  
Classes**

mothercraft classes. Throughout the year mothercraft classes were held at local authority clinics. Nearly 1,000 ante natal patients made 4,600 attendances at these clinics, where instruction was given on such subjects as personal hygiene, diet, sleep and the mechanism of labour, together with simple exercises in preparation for labour. These classes were greatly appreciated by young mothers, as letters and marks of appreciation were received.

**Child Welfare  
Clinics**

There was an increase in the number of children who attended child welfare clinics, and 17,991 children under the age of five years made 107,254 attendances. General practitioners continued to send their patients to the clinics for blood testing; 1,616 mothers attended for this purpose, 451 more than in 1961.

**Blood  
Testing**

The following cases of pre-school children were referred to the School Health Department for mental and physical assessment:—

Mental assessment ... ..	51
Physical assessment ... ..	18
Speech defects ... ..	25
Hearing tests ... ..	35
Education ... ..	21
Orthopaedic defects ... ..	229
Eye defects ... ..	333

After-care and follow-up of persons suffering from venereal disease continued during the year. The nurse dealt with 217 new cases, making a total of 897 visits. Of these cases, 134 eventually reported for treatment and eleven promised to do so. The remaining cases were not contacted as they had removed or had given fictitious addresses and could not be traced.

#### Venereal Disease

	1961	1962	Clinic Attendances
Total number of centres at which ante natal clinics were held ...	20	14	
Number of clinic sessions held per week (medical) ... ..	23	14	
Number of new cases attending ante natal clinics (doctors' sessions) ... ..	1,510	1,026	
Total attendances at ante natal clinics ... ..	8,872	5,604	
Total attendances at post natal clinics ... ..	243	187	
Total number of new cases attending midwives' ante natal clinics	1,596	1,673	
Number of midwives' clinics per week ... ..	12	14	
Number of attendances at midwives' clinics at which health visitors were in attendance to practice health education ...	2,200	8,312	
Number of centres at which health visitors conducted relaxation and mothercraft classes ... ..	14	16	
Number of mothers attending relaxation and mothercraft classes	682	954	
Number of mothers attending who were booked for hospital delivery ... ..	580	750	

In July, 1962, a detailed study of accidents occurring in the home was started.

#### Home Accidents



Nine hospitals in the city notified the Medical Officer of Health of all persons attending as a result of an accident occurring in the home. A visit was then paid by a health visitor to obtain specified information, and, if possible, discover the cause of the accident.

This investigation is still in progress, and detailed information will be available at the end of twelve months.

#### Welfare Foods Distribution

This service arranges for the distribution to the public of National dried milk, cod liver oil, vitamin tablets and orange juice. For this purpose, 51 centres were still in use throughout the city:—

17 full time centres  
13 part time centres  
21 voluntary centres

The majority of the full-time and part-time centres were in clinic premises, but we are greatly indebted to two city stores for providing facilities for the distribution of welfare foods on a full-time basis, and to the chemists and proprietors of dairies and shops who distribute welfare foods on a voluntary basis.

The distribution figures for the past two years are as follows:—

	1961	1962
National Dried Milk (tins) ...	315,690	272,946
Cod Liver Oil (bottles) ...	27,967	16,260
Vitamin Tablets (packets) ...	26,197	15,455
Orange Juice (bottles) ...	182,414	107,170

It will be seen that there has been a decrease in the distribution of welfare foods compared with the previous year.

The sales of proprietary brands of dried milk and vitamin preparations, however, have increased, as shown in the following table:—

	1961	1962
Proprietary Dried Milk Preparations ...	142,273	192,189
Proprietary Vitamin Preparations	25,126	39,439

#### Staff

The staff of this service consisted of two supervisors, one general assistant, 21 full-time and 11 part-time distributors.

## HOME NURSING SERVICE

The work of this service includes the nursing of all types of cases at home.

Nursing visits were made between the hours of 8.30 a.m. and 1.30 p.m. **Visits** and 4.30 p.m. and 7 p.m. In addition, an emergency staff were on duty each evening from 8 p.m. to 10.30 p.m. The nurses were based on nine centres situated at suitable points throughout the city.

The number of cases visited throughout the year was 12,552, and the number of nursing treatments totalled 350,018—5,062 more than in 1961.

5,040 late night visits were made to give sedatives, morphia, etc.; an increase of 254. In addition, the district nurses attended 439 clinic patients and gave 6,675 treatments.

The pattern of the work continued to change; many more geriatric cases **Recruitment of Staff** were nursed, thus each visit took a longer time. As the service was still understaffed this meant that each nurse had a heavy case load. During the next few years changes will take place in the hospital accommodation in the city, and a fully-staffed service will be essential. Throughout the year, therefore, every effort has been made to recruit staff and to interest newly qualified and student nurses in district nursing. There were signs by the end of the year, that this work was having some effect on the number of nurses presenting themselves for district nurse training.

During 1962, seventeen nurses were trained as Queen's nursing sisters, **District Nurse Training** including three male Queen's nurses. Ten were trained for Liverpool, six were trained as independent students and one was trained for Westmorland County Council. Seventeen students from other authorities, Wallasey, Warrington, St. Helens, Flintshire and Blackburn, attended the three weeks' lecture block and weekly study day for theoretical instruction: a total of 34 students were trained by the district nurse tutor in the theory of district nursing.

The soiled laundry service has continued to be an invaluable aid to **Soiled Laundry Service** patients nursed at home. During 1962, 229 patients availed themselves of this service.



**Loan of  
Linen**

To enable needy patients to make full use of the laundry service, a loan scheme was instituted to ensure that there was an adequate supply of linen to cover the collections. The collection of laundry took place daily or once or twice weekly, as necessary.

During 1962 an absorbent pad was used by the district nurses for incontinent patients. These have been of great assistance as they are easy to place under the patients. This has obviously provided greater comfort for many patients.

**Urine  
Testing**

During 1962 the district nurses were performing routine urine tests on tuberculous patients who were receiving chemotherapy. This test is a simple way of determining that a patient is following his course of treatment and is of great assistance to the chest physicians.

**Home  
Nursing  
Equipment**

The demand for this service continued to increase during 1962, and it was necessary to purchase new equipment to avoid any delay in the delivery of items required by patients. During the year, some specialised lifting equipment was purchased for the use of severely crippled bedridden patients.

The number of items of equipment loaned during 1962 was 5,049. There was some evidence that articles were being required for a longer period of time, thus decreasing the turnover, and necessitating the provision of a larger stock of equipment.

## DAY NURSERIES

Eighteen nurseries and child minders were registered with the local authority under the Child Minders Regulation Act, 1948. These nurseries were visited regularly by one of the assistant medical officers to give advice and help on any matters regarding the welfare of the children.

Twelve nurseries continued to provide accommodation for 670 children.

During 1962, following an inspection by the Ministry of Health and the Ministry of Education, The Elms and Great George Square day nurseries were added to the list of nurseries approved as training centres for students taking the nursery nurse's examination. There are now eleven training nurseries in Liverpool.

In February, 1962, an analysis of the reasons for admission to day nurseries was carried out. This showed an interesting change from a similar analysis carried out in 1957, when the chief reason for admission was illegitimacy. As is shown by the following list, the chief reason for admission now is parental disharmony.

								1957	1962
Divorced or separated with insufficient allowance	...	...	...	...	...	...	...	26%	30%
Unmarried mothers	...	...	...	...	...	...	...	28%	25%
Husbands with low income	...	...	...	...	...	...	...	21%	15%
Incapacity of mother or father	...	...	...	...	...	...	...	11%	7%
Domestic emergency	...	...	...	...	...	...	...	4%	8%
Widows	...	...	...	...	...	...	...	4%	5%
Students or apprentices	...	...	...	...	...	...	...	Nil	3%
Physically handicapped child or sibling	...	...	...	...	...	...	...	Nil	2%
Widowers	...	...	...	...	...	...	...	1%	2%

From these figures, it can be deduced that the provision of day nursery accommodation made it possible for children to remain in their home even after the break up of the family. This is an important fact to consider when day nursery work is discussed.

The health of the children was good throughout the year, though nursery children suffered in the epidemic of measles in the city.



## CHIROPODY SERVICE

Since its inauguration by the Health Committee in July, 1960, the demand for this service has grown and the patients appreciate the treatments which they receive. In an attempt to reduce the waiting list of new patients, the time interval between treatments was lengthened in normal cases.

The attendance rate improved and was high, except during very inclement weather. Many aged persons enjoy their visits to the clinic as it provides an opportunity to meet other people. The sixteen district clinics in the maternity and child welfare centres have proved ideal for chiropody treatment as they have all the amenities required and are situated in suitable areas. The clinic set up in Mill Street was greatly appreciated by both staff and patients, as it is convenient and well planned. The Foot Hospital premises, following alterations, were in full use, and the clinics held at River View Old Age Persons' Club and the League of Welldoers' Club, were popular, as they are social centres for the elderly and the chiropody service was regarded as an essential amenity. Ambulance transport was available for those who required it and some domiciliary visits were paid. Although the service was still understaffed the number of domiciliary visits was 1,024; 478 more than in 1961.

The clerical work was arranged so that the chiropodists only filled in the treatment given, and completed their attendance records. Appointments were booked for the patients through the Central Foot Clinic.

Early in 1963 it is planned to open an appliance room in the basement of the Central Foot Clinic. This will permit supports, insoles and shields to be made on the premises and research into the most suitable types of appliance can be carried out. The chiropodists are eager to undertake this work, and it will be a great advantage to the patients.

## HOME HELP SERVICE

In February 1962 the restriction imposed on the Home Help section in 1961 was removed and, with the gradual recruitment of home helps, it became possible to provide applicants with the amount of service needed.

The number of households assisted in 1962 was 3,614, an increase of 803 **Number of cases** on the previous year and included the following categories:—

	1962	1961
Maternity ... ..	202	212
Tuberculosis ... ..	10	5
Chronic sick including aged and infirm ...	2,649	1,859
Other complaints ... ..	753	735

As in previous years the number of maternity cases was small because **Maternity cases** there is a charge made for service. Although only 202 cases were actually helped, more than 400 applicants for this service were visited and arrangements made for help to be provided when necessary. These arrangements included requests from employers for particulars of salary or wages and entailed at least two visits. In many cases husbands preferred to stay at home from work than pay for help.

There were nine cases of toxæmia needing assistance for varying periods **Toxaemia of pregnancy** and all requests were fulfilled including those who were not prepared or could not pay for help as approval for free service in such cases was given by the General Purposes and Staff Sub-Committee in July, 1962.

Under this heading are the 753 patients who needed daily attention for **Other complaints** a short period because of acute illness.

This was the service most affected by the reduction imposed in 1961 and **Chronic sick, etc.** on revisiting in 1962 following the restoration, the visitors were appalled at the neglect shown by families in some instances and a lot of hard work was required to improve the home conditions.

The length of service each day and the total period provided depended **Hours of service** on the need of the applicant and the staff available. The amount to be paid also governed the applicants request in some cases. As a general rule the service was organised in the following manner:—



*Full-time service* for 42 hours weekly was supplied to homes where young children were present. In most cases the mother was ill at home and in other cases she was in hospital, or was deceased or had deserted her family.

*Part-time service* was provided for patients who required a fair amount of daily attention for meals, shopping and housework and was requested principally by patients returning from hospital or suffering from acute illness. Both of these services were provided for periods of one to four weeks unless illness persisted and other arrangements were impossible to make.

*Some daily service* was given to a large number of aged and handicapped persons who required a meal, some shopping and fire-lighting and the home helps caring for this type of patient usually looked after two of them each day. This has proved a very necessary service, especially in the winter months and it is greatly appreciated by the recipients.

The provision of mobile meals frequently released a home help on three days during the week and enabled her to care for another person.

#### Weekly Service

Help on one or two mornings per week was provided for those whose principal need was for housework and shopping. A few of the pensioners receiving this service were not in urgent need but experience has proved that it is wiser to assist a little earlier than might be necessary rather than wait until conditions deteriorate.

*Evening service* was provided for some invalids and for children returning from school to an empty house because of the absence of the mother in hospital.

#### Administrative Staff

The administrative staff included:—

- 1 Organiser
- 1 Assistant Organiser
- 3 Visitors
- 3 Clerical Staff

As the home help staff increased it became apparent that extra administrative staff would be needed. Each additional home help accounted for an average of four cases and this entailed extra visiting and clerical work. In addition to the routine clerical work there is constant interruption from telephones which are the means of communication with the home helps who work from their homes and who have one office only in the city.

The number of home helps at 31st December, 1962, was 322. The Home Help number actually interviewed was 330 and of these 157 were appointed. 69 Staff. women resigned during the year leaving a total increase in staff of 86.

Recruitment of home helps recommenced in February, 1962, and was a difficult task as they must be women of very good character and capable of working without supervision in the home of invalids who are frequently immobile and sometimes blind. They are in a vulnerable position for they are present in the home for longer periods than other visitors and are the target for suspicion if money or goods are mislaid.

Should there be a complaint of theft which warrants investigation the C.I.D. are requested to intervene immediately. There were two such cases in 1962 involving sums of £18 and £7 15s. 0d., both of which were handled by the C.I.D. and in both cases the statement of the home help was accepted.

The responsibility for sending staff into homes is fully realised and full enquiries are made about each applicant prior to her joining. In addition her home is visited as this gives a clear indication of her worth as a worker.

As well as possessing the qualities mentioned above, the home help must be kindly and there were many instances of this during the past year, three of which are shown below.

(1) A man aged 37 years suffering from a heart condition which needed surgery had five children aged from fifteen years to eighteen months and his wife had left him. He was very loath to have his family taken into care and as his son of fifteen years was at home all day and was very helpful, a home help attended daily from 9 a.m. until 1 p.m. On Sundays the home help took the entire family to her home for the day in order to break the monotony. She also visited the patient in hospital and reported on the family. After three weeks of this service it was decided to take the family into care.

(2) An elderly lady living alone whose neighbours were also elderly was quite helpless following a seizure and was awaiting admission to hospital for more than three weeks. Her home help voluntarily attended nightly and at the weekends. This case afforded great anxiety to the section and when finally admitted to hospital the patient died on the third day.



(3) An elderly lady living alone and expecting the ambulance to take her to hospital would not go unless accompanied by her home help. The help stayed until 10 p.m. when the ambulance finally called and it was midnight before she was free to leave the hospital.

In conclusion, this was a satisfactory year with few complaints and many letters and messages of gratitude.

## HEALTH EDUCATION

The club at Norris Green clinic continued to flourish, with an average attendance of 25 parents at each meeting. The number of meetings were increased from one to two each month; held on the first and third Wednesdays. **Parents Clubs**

Several interesting talks were given during the year on diverse subjects; chiropody, physiotherapy, the work of the Samaritans in Liverpool, and beauty culture, were only a few. Special attention was given to road safety and to the inauguration of a Tufty Club for the under five year old age group.

The following social events were organised by the club:—

July	A children's day outing to Wales.
January and October	Two evening parties to which the clinic medical officer and senior health visitor were invited.
December	A children's Christmas party which was very enjoyable with 40 children and parents present.

The members of the club enjoy their meetings, and have a good relationship with the clinic staff. One member of the staff attends each meeting and there are opportunities for the informal exchange of ideas, which is beneficial.

This club continued to be small in numbers, and the membership was frequently changing. It is difficult for the members to attend meetings, as the majority are single girls or widows who cannot easily leave their children in the evenings. When they were able to attend it was obvious that the activities of the club were greatly appreciated. **Sarah McArd Parents Club**

During 1962 there were two meetings concerned with road safety which roused interest, and two sewing classes which many members found useful. In December a social evening was arranged with members of the Norris Green Parents' Club and visitors. This was a great success, and the student nursery nurses put on an entertainment which was very amusing and enjoyable. This club is difficult to run and needs a great deal of encouragement, but is still a worthwhile project.

Many members of the staff, including medical officers, the chief welfare officer and the chief public health inspector gave lectures on request to various organisations. Officers of the mental health section have addressed **General**



meetings of professional and lay persons on various aspects of mental health, with particular reference to the community care services. The health visitors have continued to meet requests from various bodies to speak at evening meetings on the work of the health visitor, the health services and other subjects.

#### **Liverpool Show**

As in previous years, certain aspects of the work of this department were demonstrated at the Liverpool Show. The emphasis was on mental health and the training of sub-normal persons.

The exhibit showed the initiation and progression of training of sub-normal children, from nursery to adult level, and there was a demonstration of sub-contracted work being done by sub-normal adults who had progressed from the training stage.

Stress was laid on the co-operation between services for aged and handicapped persons, and a unit was provided for inoculation against poliomyelitis.

#### **Smoking and Health**

Liverpool is a constituent authority of the recently formed Merseyside Cancer Education Committee. It is anticipated that a Lay Administrator to this Committee will be appointed early in 1963 and that the question of Smoking and Health will play some part in the scheme of health education on cancer to be formulated by him. Posters on the subject of Smoking and Health are on display in clinics and other buildings and lectures on this subject have also been given by members of the staff.

## EPIDEMIOLOGY

### *Incidence of Notifiable Infectious Disease.*

The number of cases of notifiable infectious disease occurring in 1962 compared with 1961 is shown in the table below :—

Disease							Notified Cases 1961	Notified Cases 1962
Diphtheria	...	...	...	...	...	...	—	1
Dysentery	...	...	...	...	...	...	335	296
Enteric Fever	...	...	...	...	...	...	—	1
Erysipelas	...	...	...	...	...	...	29	27
Food Poisoning	...	...	...	...	...	...	99	37
Malaria (contracted abroad)	...	...	...	...	...	...	2	9
Measles and German Measles	...	...	...	...	...	...	5,546	10,832
Meningococcal Meningitis	...	...	...	...	...	...	10	16
Ophthalmia Neonatorum	...	...	...	...	...	...	73	91
Paratyphoid Fever	...	...	...	...	...	...	4	—
Acute Primary and Influenzal Pneumonia	...	...	...	...	...	...	383	379
Paralytic Poliomyelitis	...	...	...	...	...	...	50	2
Non-paralytic Poliomyelitis	...	...	...	...	...	...	17	—
Puerperal Pyrexia	...	...	...	...	...	...	498	489
Respiratory Tuberculosis	...	...	...	...	...	...	405	438
Non-respiratory Tuberculosis	...	...	...	...	...	...	54	50
Scarlet Fever	...	...	...	...	...	...	321	250
Whooping Cough	...	...	...	...	...	...	341	208

The incidence of infectious disease in 1962 was less than in 1961 with the exception of measles.

Notified cases rose through the year reaching epidemic proportion in the **Measles** last quarter. The disease was relatively mild, affecting mainly children. The distribution through the year and the comparison with other years is shown in the tables below.



## MEASLES NOTIFICATIONS

	Total number	Weekly range	Highest weekly figure
1st Quarter ... ..	320	7— 59	Week ending 31.3.62— 59
2nd Quarter ... ..	605	22— 75	23.6.62— 75
3rd Quarter ... ..	2,307	83—294	18.8.62—294
4th Quarter ... ..	7,479	224—813	1.12.62—813
All Quarters ... ..	10,711	—	—

Comparison  
with other  
years

Measles notifications reached the highest level since 1940, and were very much higher than recent years.

Year	Measles notifications
1957	10,180
1958	7,189
1959	8,299
1960	8,840
1961	5,541
1962	10,711

In Liverpool there is no biennial epidemic pattern. The peak years since 1930 are shown below.

Previous years with 10,000 or more measles notifications:—

Year	Measles notifications
1933	10,004
1934	10,055
1940	11,046
1951	10,464
1953	10,090
1957	10,180
1962	10,711

Whooping  
Cough

260 cases came to the notice of the department. Of these over one quarter were sufficiently ill to warrant hospital admission.

Whooping Cough Cases Notified by General Practitioners	Notified Cases Passed to Hospital	Other Hospital Cases found to be Whooping Cough	Total Cases
208	17	52	260

An examination of the immunisation state of the notified cases showed significantly less hospital admissions among the immunised than the non-immunised. General observation confirmed that the disease was less severe in immunised persons.

Influence of  
Previous  
Immunisation

Immunisation State	Cases Removed to Hospital	Other Cases	All Cases
Never Immunised ... ..	64	144	208
Incomplete Primary Course ...	—	4	4
Primary Course but no booster	4	42	46
Full Course with booster ...	—	2	2
Total ... ..	68	192	260

The cases were nearly all in children. Nearly three-quarters were in the pre-school group.

Age  
Distribution

	Males	Females	Total
Under 1	25	30	55
<div>1 } 2 } 3 } 1-4 4 }</div>	<div>27 } 16 } 13 } 66 10 }</div>	<div>21 } 22 } 20 } 84 21 }</div>	<div>48 } 38 } 33 } 150 31 }</div>
<div>5 } 10 } 5-14</div>	<div>20 } 3 } 23</div>	<div>28 } 1 } 29</div>	<div>48 } 4 } 52</div>
15	—	3	3
All Ages ... ..	114	146	260



### Poliomyelitis.

Only two cases of poliomyelitis were notified and confirmed during 1962. Both cases were paralytic, occurring in young girls of eight years of age. In both instances the course of the disease was mild and the paralysis was slight. The first case occurred in January and the second in March. No evidence was found relating one case to the other. The earlier case had received a course of three injections of poliomyelitis vaccine, starting in November, 1958, and finishing in June, 1959. The later case had not been immunised against poliomyelitis.

**Contacts** The contacts of both cases were kept under regular surveillance for three weeks. None developed signs or symptoms of any illness. Virological investigations were carried out on the contacts but no viruses were isolated from them.

**Virus type** From the earlier case a type 1 poliomyelitis virus was isolated.

**Control** The method of "blanketing" with oral poliomyelitis vaccine was adopted. The contacts of both cases were first examined clinically for signs of infection and then virologically for possible poliovirus excretion. As soon as the necessary specimens for virological examination had been taken, they were given oral poliomyelitis vaccine. Thus the problem of differentiation between "wild" strains of poliomyelitis virus and "tame" vaccine strains was avoided.

**No Secondary Cases** None of the contacts was found to be excreting polio virus. No secondary cases arose.

**Effect of Poliomyelitis Campaign** Although 1962 was a year of low incidence of poliomyelitis throughout the country, the low incidence of poliomyelitis in Liverpool can be attributed largely to the highly-successful anti-poliomyelitis immunisation campaign in 1961-1962.

### Dysentery.

Sonne dysentery continued to occur in the now familiar established pattern of sporadic endemic spread. The total number of cases notified during the year was 39 less than the year before.

**Liaison with Hospitals and General Practitioners** The decrease in numbers of notified dysentery cases is due in part to more measures of control resulting from closer liaison between the general practitioner, hospital and Health Department staff.

False results were being obtained in bacteriological investigations of patients because of the effects of antibiotic and chemotherapeutic treatment. Patients would be prescribed a course of treatment and due to nonconformity to their doctor's instructions would still be taking the drugs after the course should have been completed. Specimens collected, after the course should have been completed in these cases, would give a false negative result due to the presence of the drug. **Problem of Medication**

To avoid this difficulty, in each notified case the details of treatment, particularly in relation to chemotherapy and antibiotics, were ascertained by one of the Assistant Medical Officers, who discussed the details of the case with the doctor giving the treatment. The Public Health inspector calling to arrange collection of specimens was then advised accordingly, so that no specimen was collected until a clear day free from treatment had been completed.

It was found that some of the patients had altered their doctor's treatment and were not adhering strictly to his advice and consequently reducing its effectiveness. In other instances several persons affected would take tablets left over from a previous case in the same family and not inform their family doctor. In these instances neither the patient for whom the tablets were prescribed nor the other member of the family taking the left-over tablets would receive adequate dosage to deal with the infection. Furthermore although the detailed history of the taking of drugs was elicited with great care, some patients were unwilling to disclose their actions, probably due to a feeling of guilt over their self-medication. Unless this history was obtained, negative results might be found on investigating contacts which would be produced from the taking of the drug and an unknown chronic excretor might remain undetected. As a further safeguard, in many instances, a full examination of all members of the household or establishment was carried out before the case was closed as free from infection. **Self-treatment**

A concentrated effort was made to eradicate two reservoirs of infection. These were contained in the areas served by an infant and junior school and a nearby nursery. For several years sporadic outbreaks of Sonne dysentery had occurred in these two areas. A large group of cases would occur in the school or nursery followed by a lull, then a further group of cases followed by another lull and so forth over a period of several years. At no one time would there be a total absence of disease from these areas. The exacerbation of the disease occurred shortly after the entry into school or nursery of new **Eradication of Reservoirs of Infection**



groups of children who would rapidly become infected and carry the infection to their families. Once the disease has run its course, there would be few new cases until the next entry of fresh children. In practically no instances were second attacks observed in the same child.

#### **Investigation of Staff**

A full investigation of the teaching, domestic and meal staff of both establishments was carried out and individual stool examinations were repeated. No chronic carrier was detected among them.

#### **Hand Washing in Schools**

Facilities for hand washing were found to be totally inadequate in the schools concerned.

#### **Results**

A sample of children examined on their return to the classroom immediately after the mid-morning break and again at the end of the morning, just prior to receiving their school meal, revealed not one single child with hands that were satisfactorily clean. The nursery children's hands were in a much cleaner state, as they received much more personal and individual attention from the staff. In the schools with the small number of sinks available, it was a physical impossibility for all of the children to wash adequately before their meal. To dry their hands without contamination using the roller towels provided was out of the question after more than the first ten or so users. If one of the early users in the queue was a carrier and had not washed his contaminated hands sufficiently to remove the contaminating bacteria then the towel would become a channel of spread of infection to subsequent users.

#### **Roller Towels**

#### **Hand Washing Drill**

A strict drill of hand washing after every visit to the toilet was introduced and this was supplemented by removing the roller towels and issuing a disposable paper towel individually to each child by the staff. Apart from serving to control the spread of infection by interfering with one of the channels of transmission, this practice gave an opportunity for instructing the children in personal cleanliness.

#### **Play Centre**

The school yard was used in the evening as a play centre for the local children. In the middle of the yard was a toilet block. No supervision of the yard or toilets was maintained in the evening. Children have a natural affinity for water and were seen to use the supply in the urinals and lavatory pans for water pistols and for sailing paper boats. Affected families were found whose children visited the play centre and could have easily picked up their infection in this way. To counter this source of infection the practice of leaving the toilets open in the evening has been discontinued. Although perhaps it may be considered preferable that toilet provision should be made,

it is certainly better that children should make a short journey home to the toilet than be permitted to misuse them in this fashion and risk spreading dysentery.

An examination of previous records of cases occurring in these areas indicated that some of the children had returned to school or nursery too soon. The practice of requiring three successive negative stool examinations permitted intermittent excretors to remain undetected. To avoid this recurring two measures were adopted. One was to extend the period between examinations to a minimum of one week instead of one day, and secondly only to decide the clearance of the younger members of the family when the whole family was found to be free from infection, lest the children being examined were re-infected by adult carriers in the family.

**Exclusion of  
Chronic  
Excretors**

The average time taken from the onset of initial symptoms to the final clearance was between five and six weeks. Some cases took as long as four months to become free from infection. The nursery cases persisted for a week or so longer than the school cases. In the nursery as an added precaution all the nursery children, including new entrants and the staff had an examination of stools carried out at the commencement of each of two terms following the last outbreak, in an effort to eliminate the possibility of an undetected carrier remaining.

The success of this policy may be assessed by the total absence of cases of Sonne dysentery from the school and nursery for a period of six months following the last outbreak, that is up to the time of writing of this report.

### **Diphtheria.**

During the autumn months several cases of suspected diphtheria were reported to the department. Each of these cases and the surrounding contacts were investigated by clinical examination and nose and throat swabbing. One case only proved to be diphtheria. This was a case of a boy aged eight suffering from a severe tonsillitis, which on investigation proved to be due to a virulent *Corynebacterium diphtheriae gravis*. As an added complication it was found that he was also a carrier of *Salmonella paratyphi B* phage type scarborough. He recovered uneventfully from the diphtheria but remained a persistent carrier of the paratyphoid organisms.

Investigation of the contacts of the confirmed case and the other suspected cases and their contacts revealed no other carriers of virulent diphtheria



organisms. However, in six instances persons were found to be infected with *Corynebacterium diphtheriae mitis* of an atypical type which proved to be non-virulent.

### Enterovirus Survey.

In co-operation with the Routine Virus Laboratory during the latter part of 1962, a survey of the carrier rate of enteroviruses was started. Two or three families per week were investigated, the technique employed was to collect a faecal specimen from a child under one year of age whose name would be taken at random from the birth register, the sample being selected so as to ensure an even distribution over all parts of the city and to ensure that the family were willing to co-operate. The sample was investigated for enteroviruses and the child submitting the sample was examined; a careful medical history taken and also a history of any medical conditions occurring in the remainder of the family. The difficulty met in earlier surveys of the length of time it takes to isolate and identify the virus was overcome by an "early-warning" scheme. The laboratory informed the department as soon as cytological changes were observed in tissue culture suggestive of virus infection. The family was then revisited, the full medical history taken, medical examination carried out, particularly with a view to eliciting muscle weakness, and specimens collected from the remainder of the child's family or household contacts. These specimens were then stored in deep freeze, so as to be available for full investigation should a pathological virus be found in the original test. By this means although a few visits were wasted, it was ensured that a medical examination and the taking of history from the contacts was carried out as soon as possible after examination of the survey case, since if this were delayed until the full virological identification was available, memories would have faded and the physical signs of transitory muscle weakness would have gone.

33 pathological virus isolations were made. These are listed in the table below :—

#### ENTEROVIRUS SURVEY

##### Positive isolations—

Echo virus type	2	...	...	...	...	...	...	4
„	13	...	...	...	...	...	...	1
„	18	...	...	...	...	...	...	1
„	21	...	...	...	...	...	...	1
Adenovirus type	2	...	...	...	...	...	...	1

Coxsackie virus	type A2	...	...	...	...	1
	„ A4	...	...	...	...	1
	„ A6	...	...	...	...	1
	„ A9	...	...	...	...	1
	„ A10	...	...	...	...	1
	„ B2	...	...	...	...	1
	„ B4	...	...	...	...	1
Unidentified virus		...	...	...	...	1
Polio virus	type I	...	...	...	...	3
	„ II	...	...	...	...	2
	„ III	...	...	...	...	5
	types I and II	...	...	...	...	2
	„ I and III	...	...	...	...	1
	„ I, II and III	...	...	...	...	1
	„ II and III	...	...	...	...	3
						—
						33
						—

In each instance investigated no abnormal medical history or physical signs were found. The polioviruses isolated were due to poliomyelitis vaccine and were of the “tame” vaccine type not the virulent “wild” or pathogenic type. It is interesting to note that in one instance the person became a carrier of the vaccine virus, although he had not received the vaccine. He had become immunised by cross-infection within his family contacts.

Another feature of interest is that on comparing the pathological isolation in the City of Liverpool with the surrounding area, it may be seen that the total number of virus isolations of pathological viruses in relation to the population is much less than in the surrounding areas and this may well be due to the higher level of poliovaccine virus in the community. In keeping with this hypothesis, is the finding that where vaccine virus is isolated, other pathogenic viruses did not occur in the same case at the same time. This is suggestive of a “blocking” phenomenon, the vaccine virus preventing infection by other pathogenic enteroviruses. On the other hand, the polio vaccine virus itself does not block the vaccine virus of a different strain, in other words types 1, 2 and 3 have been found separately and together. In the early stages of the work the problem of differentiating between “wild” and “tame” viruses proved to be technically difficult and no reliable distinction could be made in the early stages of the survey. However, Glaxo Laboratories very kindly placed their facilities for differentiation between “wild” and “tame” at the disposal of the department and offered to act as a reference centre for this work. This generous offer is much appreciated.



### Food Poisoning.

The year was outstanding in that the incidence of food poisoning in the town was very low indeed. This has resulted from a very vigorous campaign for educating food handlers in food hygiene coupled with intensive efforts to detect and treat carriers. There was no outbreak involving a group of persons other than within a single family. Most of the 37 notified cases were individual.

The organisms isolated were as follows:—

Organism						Number of Persons from whom Organism isolated	
Staphylococcus pyogenes	...	...	...	...	...	12	
Salmonella typhimurium	...	...	...	...	...	15	
„ manhattan	...	...	...	...	...	1	
„ stanley	...	...	...	...	...	1	
„ muenchen	...	...	...	...	...	1	
„ oranienberg	...	...	...	...	...	1	
„ eastbourne	...	...	...	...	...	1	
„ give	...	...	...	...	...	1	
„ newport	...	...	...	...	...	1	
„ bareilly	...	...	...	...	...	1	
„ bredeney	...	...	...	...	...	1	
„ ruiru	...	...	...	...	...	1	
						Total	37

### Influenza.

The influenza “spotting” scheme was put into operation during the winter months. A small number of isolated cases of influenza occurred but there was no epidemic outbreak.

## CONTROL OF RADIATION HAZARDS

Although the Local Authority has no direct administrative function to carry out in relation to the safe handling of radioactive materials, nevertheless it has an important role to play in an advisory and coordinating capacity. The absence of a clearly defined statutory responsibility must never be allowed to interfere with the general duty of maintaining a constant vigilant watch on every possible hazard that may affect the health or safety of the community. Throughout the year a close and effective co-operation between City, Port and Tunnel Authorities and the United Kingdom Atomic Energy Authority has ensured that no hazard to any member of the community has been permitted to arise from any radioactive source or substance passing through the town.

**Role of Local Authority**

Health and safety requirements must always dictate the measures necessary to restrict or control movement of a radioactive source or substance. A secondary consideration, the importance of which must not be forgotten, is the need to avoid delay in moving these sources. It is very easy for over-anxiety over possible health hazards to lead to undue restrictions hampering the rapid movement of radioactive materials. In spite of the technical complexity of some of the problems involved, no unnecessary delay has ensued from health and safety restrictions. In every instance both requirements have been met with an ample margin.

**Need for Accurate Information**

An instance of the difficulty that can arise in the absence of detailed accurate information on the labelling of a container is illustrated by the following example, fortunately a rare occurrence.

The Medical Officer of Health was approached by a transport undertaking and the Harbour Master for advice on the handling of a container of the radioactive isotope iodine 131, that had arrived from overseas. The container, which was a box eighteen inches across, was at first thought to be a "returned empty", and had been deposited in an office for collection where it remained for several days during the course of which it was used for a handy seat. Only then was it discovered that it still contained radioactive contents. As soon as this became apparent it was transferred to the safety of the casemate in the Herculaneum Dock.

On examination, if the labelling were taken at its face value, handling restrictions needed to be applied as an appreciable dosage of ionising



radiation would be received at and near its surface. Consequently, taking no possible risk, the container was despatched as an individual load with the necessary precautions to Capenhurst.

Only later was the whole story unravelled. The consignment was originally from this country destined for an overseas University. Unfortunately it was delivered to the wrong address and by the time it arrived at the correct one, the iodine 131, being of very short half life, had so little radioactivity left that it was of no use and was returned to the supplier in this country. By the time of arrival back in Liverpool the radioactivity was so low as to be of no consequence.

#### Need for Accurate Labelling

Not one single date was to be found on the labels. Had the date of the original measurements of the activity of the contents been clearly marked on the container, then a great deal of trouble would have been avoided, as also several hours of anxiety suffered by the person who had used the container for a seat.

#### Routing of radioactive loads

The choice of a suitable route for road vehicles to avoid hazards from possible collision in an accident is an important aspect of the movement of radioactive materials through the Port. The following example illustrates the way in which the various authorities co-operate to ensure complete safety.

Well in advance of the date of arrival, the Medical Officer of Health was asked for advice on the route to be taken by a special load arriving at the Port and to be delivered to the Atomic Energy Authority. This allowed adequate time for full and detailed consideration of the possible hazards. The difficulties of dealing with an accident in the Mersey Tunnel necessitate a very much higher standard of safety than would be accepted for normal road journeys and yet the route through the Tunnel would otherwise be the one of choice.

The consignment was a large source of caesium 137 packed and despatched by the United States Atomic Energy Authority. In this instance the packaging methods were of a very high standard. Full technical information was made available to the department, so that a detailed plan of movement could be worked out. With the co-operation of the police and the Mersey Tunnel Manager a route using the Tunnel was decided with an alternative using the Widnes Runcorn Bridge and avoiding the town centre in case the consignment did not pass the extra stringent safety tests required for the Tunnel.

A special vehicle adapted to take the particular load was sent by the Atomic Energy Authority to wait at the quayside so that the container could be loaded direct from the ship. A team of safety experts from the Atomic Energy Authority with health physics measuring equipment boarded the ship, accompanied by members of the department staff and together examined and tested the container. On being completely satisfied with the results of the examination and tests, the container was loaded under close supervision directly on to the vehicle and under police escort accompanied by the safety team with their health physics instruments taken safely through the Tunnel on the shortest route to its destination.

By carefully planned teamwork and close co-operation, even difficult loads can be handled with complete safety and in this case a much longer journey to its destination was successfully avoided by use of the Mersey Tunnel.

**Co-operation  
with Atomic  
Energy  
Authority**



## HEALTH HAZARDS IN FUMIGATION

### Use of Organic Halides

The Liverpool fumigation firms carry out a wide range of fumigation, rodent control and disinfestation work not only in the Liverpool Docks and the City of Liverpool, but in premises all over the country, both from their Liverpool headquarters sending out teams of trained personnel and from subsidiary area headquarters in various parts of the country. For many years their health and safety record has been excellent but familiarity breeds contempt as during the year accidental poisoning occurred from methyl bromide disinfestation due to insufficient regard for its dangers.

Organic halides are used in two forms, the heavy gas methyl bromide and as a liquid spray of a mixture of ethylene dibromide, ethylene dichloride and carbon tetrachloride. These are all poisonous to man and respirators have to be worn in this work as unmasked persons cannot enter a working area until clearance tests are satisfactory. Although very poisonous, these chemicals have a great advantage of quickly clearing, leaving no residual contamination and are thus suitable for use in grain warehouses.

### Failure to use lachrymators

In low concentration the organic halides are quite poisonous and yet relatively non-irritant to the eyes, nose and throat. Thus accidental inhalation or absorption from contamination of the skin can occur. This is particularly so in the case of the gas methyl bromide. For this reason methyl bromide can be supplied not only in the pure state, but also with an added lachrymator. The well known tear gas chloropicrin is used as an additive and provides a safety factor in that fumigators are then unable to expose themselves accidentally to the poisonous methyl bromide without receiving obvious warning from the effects of the tear gas.

### Poisoning from Methyl Bromide

Unfortunately some fumigation firms have failed to take advantage of added lachrymator and still use plain methyl bromide. Not only have they failed in this but even after poisoning of a fumigator has occurred have still continued with their old practice against the advice of the health department.

In the case of one firm in particular, one of their employees was poisoned with methyl bromide. No lachrymator had been used. The man was allowed to return to his old job and in spite of the advice of the health department, still no lachrymator was used and the man was poisoned a

second time. He was very seriously affected and it is probable that he will never make a full recovery from the damage to his brain caused by the poison. Even after this experience plain methyl bromide was still used.

With the full co-operation of the fumigation firms an investigation was carried out in an attempt to determine whether other workers with methyl bromide, although not showing evidence of poisoning had absorbed the gas in appreciable quantity. **Blood testing of fumigation workers**

Three firms co-operated and twelve men were examined. Their blood was repeatedly tested for the presence of bromide and detailed histories of exposure at work and details of medicines taken were elicited. Eight out of the twelve persons examined showed raised blood bromide levels. The highest levels occurred as did the case of poisoning after journeys in the van containing fumigation equipment. In no case was bromide taken medicinally, so that it would appear the results were from absorption of the organic bromide fumigant.

At the present time there are no regulations that can be enforced to control adequately the use of methyl bromide. Advice is given but so many years have passed without an accident that there is a tendency to disregard this. It is obvious that enforceable regulations are required. **Need for Regulations**

Throughout the investigation, interchange of information and discussion of the problem has been maintained with the Factories Department of the Ministry of Labour, the Home Office and the Pest Division of the Ministry of Agriculture, Fisheries and Food. **Liaison with Government Departments**

The chemical analysis of blood samples were carried out in the chemical pathology department of the Sefton General Hospital. This invaluable help is very much appreciated. **Hospital Assistance**



## IMMUNISATION AND VACCINATION

### Diphtheria Immunisation

The total number of persons receiving a primary course of diphtheria immunisation during 1962 was 10,003. This was slightly lower than in recent years. In schools 332 more children were immunised than last year, in the child welfare clinics 463 less and by general practitioners 2,852 less.

The main reason for this halting of diphtheria immunisations was the temporary cessation of diphtheria immunisation while the polio immunisation campaign was in progress. A subsidiary reason was that members of the public have become confused by the multiplicity of apparently conflicting advice being given them by different persons. This has unfortunately arisen as a result of a rapid series of schedules each altering slightly the order of immunisation procedures. Too much attention has been paid to timing of these procedures and too little to the need that children should not miss being immunised altogether.

Although primary immunisations were temporarily halted the number of booster immunisations increased from 3,696 last year to 5,389 in 1962. Of these, 4,304 were given in schools by a team of doctor, nurse and clerical assistant concentrating on this work going from school to school.

### Whooping Cough Immunisation

The pattern of whooping cough immunisation has followed that of diphtheria immunisation since the use of combined diphtheria and whooping cough vaccine is now practically universally adopted in Liverpool for infants and pre-school children. The numbers immunised with a primary course were 8,848 and those given boosters were 2,166. The giving of whooping cough booster doses over the age of five years has not been the normal practice. Whooping cough immunisation in Liverpool is not very low compared with other areas as was incorrectly publicised early in the year.

### Tetanus Immunisation

The widespread practice of active immunisation against tetanus is rapidly growing and will eventually almost completely supercede passive immunisation with anti-tetanus serum. The standard practice is to give triple immunisation for primary courses and diphtheria and tetanus combined vaccine for boosters. 8,865 primary and 2,000 booster immunisations were carried out during the year.

### Tetanus Register

By the end of the year the tetanus register held in the department was completed and functioning. Unfortunately Alder Hey Children's Hospital register was only partly completed and that at Liverpool Children's Hospital

Myrtle Street, not even started. Full use is, as yet, not being made of the existing register in the Health Department. Its potential value, already great, would be very much enhanced if the two hospitals can manage to complete their sections in the near future.

Smallpox vaccinations during 1962 were 18,916 compared with 6,808 the previous year. The increase was mainly due to anxiety caused by cases of smallpox arriving in this country from Pakistan. The policy of the department has been not to refuse to vaccinate on request except when sound medical contra-indications were present. At no time was vaccination actively discouraged or vaccine deliberately withheld.

As soon as the effects of imported smallpox had passed, routine infant vaccination suffered a series of setbacks. First, a great deal of unfortunate and often sensational publicity was given to possible ill-effects of vaccination. Secondly, a recommendation was received advising deferment of vaccination until the second year of life. Although this latter recommendation may have scientific merit its practical effect is to reduce infant vaccination almost to nil. In Liverpool it had already come to notice that when infant vaccination was carried out after other immunisations instead of initially, the acceptance rate fell. Further deferment until the second year has aggravated this still further. Unless this present trend of neglecting infant vaccination is reversed then, particularly being a port, Liverpool will be left wide open and unprotected against the importation of smallpox.

Vaccinations for international travel are still demanded. In 1962, 7,445 were carried out in the Hatton Garden Clinic. The majority of these were secondary vaccinations and caused little trouble. If the present trend of low infant vaccination continues, when the children grow up they will be confronted with all the inconvenience of a primary vaccination as an adult, often at a very inconvenient time.

Early 1962 saw the final round of the major poliomyelitis immunisation campaign. 372,646 doses were issued during the year. Of these, 6,935 were injections of Salk type vaccine and 365,711 were doses of Sabin type oral vaccine. The total number of persons during the year completing a full course of vaccine was 369,516. When the Sabin type became available it was used in preference to the Salk type. On the whole persons preferred to take vaccine by mouth than by injection; 352,329 completed their course, originally of Salk vaccine, by an oral dose. There were surprisingly some who expressed a preference for an injection.



**Yellow Fever  
Clinic**

A daily yellow fever session was held at the Hatton Garden clinic in the afternoon. In addition to yellow fever vaccination other immunising procedures for persons travelling abroad were carried out. Once a week a sensitivity testing clinic was held. Towards the end of the year cases for skin testing were so few that this was discontinued, each case being dealt with individually by appointment.

## TUBERCULOSIS

A total of 493 new cases of tuberculosis were notified during 1962. Corrected for five cases found not to be suffering from tuberculosis, the number of cases for Liverpool was 488; which for a total population of 745,230 gives an incidence rate of 0.65 per 1,000 population. Of these cases, 438 were pulmonary and 50 were non-pulmonary. This gives an incidence rate of 0.59 per 1,000 pulmonary and 0.07 per 1,000 non-pulmonary tuberculosis.

During the year 943 cases were removed from the register, these included 74 pulmonary and 7 non-pulmonary deaths and 862 due to recovery or removal to another area.

At the commencement of the year the number of cases on the register was 7,190; of these, 6,735 were pulmonary and 455 non-pulmonary. These gave a prevalence rate per thousand of the population of 9.04 pulmonary and 0.91 non-pulmonary, making an overall tuberculosis prevalence rate of 9.9 per 1,000 at mid-year.

The total number of cases remaining on the register at the end of the year was 6,338 comprised of 5,936 pulmonary and 402 non-pulmonary. Thus it may be seen that the overall reservoir of cases has decreased although the number of new cases has risen.

The number of new cases found as a result of illness was 354, that is more than the year previously. The number of new cases found by examination of apparently healthy persons was 134, that is eight more than last year. The proportion of cases detected in apparently healthy persons has remained not significantly different from last year. Full details of sources of detection of cases is given in tables in the appendix.

Of the total new cases 302 were male and 186 female, that is a percentage ratio of 61.8:38.2. The bulk of the cases occurred in late adolescence and early adult life. Details of the distribution in age groups are given in table 27 in the appendix and illustrated in the graphs.

There were 74 deaths from pulmonary and seven from non-pulmonary tuberculosis in 1962, a total of 81 tuberculosis deaths. These represent rates per 1,000 population of 0.099 pulmonary, 0.009 non-pulmonary and 0.109 for all forms. The comparison for other years is shown in the accompanying graphs and the statistical tables in the appendix.



### Tuberculosis After-care and Prevention.

#### Work of the Tuberculosis Visitors

One new tuberculosis visitor was appointed during the year to fill a vacancy due to a resignation. The number of visitors employed is eighteen which makes an approximate case load of 23 new cases and 400 old cases per visitor. The principle of concentrating more visits on cases of greatest need and thus presenting the most difficult problems has been practised in addition to regular routine visits to all cases. This has meant that the time spent on special visits has increased and with extra new cases with their associated contact tracing, there has been no possibility of a reduction of the work of this section.

#### Use of Section 172

In four cases compulsory admission to hospital was enforced using the procedure of a Magistrates' Order made under Section 172 of the Public Health Act, 1936. In each case, compulsion was only resorted to as a last resort when all other methods of persuasion had failed. At the time of making of the orders all of the cases were infectious. As a result of their treatment all were rendered non-infectious. In the case of one man, a continuation order was necessary. After a second period of three months he was eventually rendered non-infectious.

Useful as Section 172 is in its enforcement, even where court proceedings are not used, the possibility of their being used is often the final factor in a patient deciding to go to hospital for treatment. Many more cases were persuaded to go into hospital knowing that if they did not, they could be compelled, rather than wait for compulsion to be brought to bear. The value of Section 172 is far greater than can be measured by the number of cases brought to court.

#### B.C.G. Vaccination of Infants

Due to gastro-intestinal infection, the maternity department at Sefton General Hospital temporarily discontinued B.C.G. vaccination of babies born in the hospital over a period of nine months. As a result the number vaccinated was only 667 compared with 1,825 last year.

#### B.C.G. Vaccination of Teacher Trainees

Students at teacher training colleges were offered B.C.G. vaccination. During the year 99 were Mantoux tested; of these, 64 had positive reactions. Of the remainder, 31 were given B.C.G. vaccination.

Vaccination was offered to 11,667 school leavers and 9,826 parents signed the consent form. The number Mantoux tested was 9,777 and 1,305 positive reactors were X-rayed to exclude the possibility of tuberculosis. There were 8,472 negative reactors and these were offered B.C.G. vaccination; 7,234 were vaccinated.

The proportion of positive reactions in school children rose slightly from 12·5 per cent last year to 13·3 per cent. This is, however, the second lowest level since the inception of the scheme in 1954, when 34 per cent were found to be positive. The fall in the death rate of children under 15 follows closely the fall in the proportion of positive reactions found on testing.

### Mass Radiography.

*C. C. Warner, Organising Secretary, Mass Radiography Service, Liverpool Regional Hospital Board, writes—*

The Liverpool Regional Hospital Board administer the Mass Radiography Service. There is a static unit operating in Hood Street, and two mobile units which visit industry throughout the City, in addition to covering South West Lancashire, the Wirral and South West Cheshire. A third mobile unit which had operated in Bootle and Kirkby since 1953 was disbanded in July, 1962.

The static unit (No. 1) examines individuals from three main sources:—

- (a) Cases referred by general practitioners, mainly within the City.
- (b) Local business firms, shops and offices.
- (c) General public volunteers.

During 1962 this unit made 30,473 such examinations, of which 10,915 were referred by general practitioners.

All prospective employees of the City Nursing Service are X-rayed by the Hood Street unit before their engagement, as are candidates for employment as school teachers, and recruits to the City police force. The entry medical examination of Corporation employees now includes a chest X-ray and all these are done at Hood Street, as are the chest X-rays for Corporation superannuation medical examinations and those required for other reasons to Corporation employees.

The Mass Radiography Service co-operates to the full with the Health Department by arranging visits of the mobile units to factories and other premises when cases of tuberculosis have been discovered there.



The numbers X-rayed throughout the Regional Hospital Board's area by the mobile units in 1962 were as follows:—

No. 2 Unit	...	38,117
No. 3 Unit	...	36,641
No. 4 Unit	...	15,353 (Six months only)

The number of cases of active pulmonary tuberculosis discovered in 1962 by the static unit at Hood Street was 85; of these, 67 were Liverpool residents. A further 19 active cases resident in the City were found by the mobile units, making a total of 86 discovered by Mass Radiography.

X-ray examination of school children has been replaced by a more selective examination of those children who are found to have positive Heaf reactions at the routine testing of the 12-13 year age group.

#### Tuberculosis Welfare

During 1962, 228 cases have been the subject of reports to the National Assistance Board with a view to determining their eligibility for the special rates of allowances applicable to cases of tuberculosis. The National Assistance Board constantly reviews persons in receipt of allowances and requests confirmation that the individuals are still receiving treatment or are under the supervision of the chest physician. The department co-operates to the full in this matter and supplies the Board with the information required.

Liaison is maintained with the Ministry of Labour with a view to assisting in the rehabilitation of suitable cases.

#### Summary of cases dealt with during the year 1962:—

A.	Total cases referred by the Ministry of Labour for rehabilitation	...	...	186
	(a) Examined and found fit for light, part-time or full-time employment	...	148	
	(b) Not fit for employment	...	...	1
	(c) Failed to attend for examination	...	...	—
	(d) Certified as non-tuberculous	...	...	—
	(e) Cases not yet examined	...	...	37
B.	Actual numbers of patients reported by Ministry of Labour as placed in employment	...	...	47

#### Occupational Therapy

During 1962, eleven patients have had occupational therapy at home and six have attended the Rumney Road Unit.

### Work of the Chest Clinics.

A statistical survey of the work done during 1962 at the four chest clinics is given in Table 26 of the appendix.

The chest physicians have kindly contributed the following reports:—

*Dr. F. J. Welton, from the Central Chest Clinic, writes:—*

133 new cases of tuberculosis were seen at the Central Clinic in 1962 compared with 155 in the previous year. This decrease follows national trends but it is important to take into account not only the quantity but also the quality of any infectious disease which is brought to light. Of the 133 new cases, 117 were suffering from the respiratory form of the disease and of this number, well over half were proved to be infectious when first seen, bacteriological tests having been demonstrated that they were harbouring the tubercle bacillus in their sputum.

As reported last year, cases of very extensive disease are still found when diagnosed for the first time, and, taken together, these facts indicate the persistence of a considerable unknown pool of infection more especially in the central area of the City.

Attention is naturally drawn to the 60 or so new cases of respiratory disease found to be sputum-positive on initial diagnosis and one striking point is the preponderance of male to female cases, the proportion being about three to one. Further, among the infectious male group, by far the greater number who are liable to propagate the disease are aged 45 or over, and it is clear that here in Liverpool, as in the rest of the country, the most likely areas for seeking out unknown sources of infection are to be found among this group of older men. In the centre of Liverpool this work presents an increasingly difficult problem as the search narrows to such obvious places as the numerous common lodging houses and dockland dwellings with their constantly moving inhabitants.

There was a fall in the number of deaths from 36 in 1961 to 29 in 1962 and also in the total of contacts examined—from 1,828 in 1961 to 1,536 in 1962, with a proportionate decrease in the number of tuberculin tests performed. These figures are of course largely dependent on the total number of new cases diagnosed.

The total of 252 B.C.G. vaccinations performed at the clinic remained steady, however, and there was an interesting increase in the number of those vaccinated by the Clinic staff at the Maternity Hospital, Oxford Street (222).



Chemotherapy may be given to tuberculosis patients at home and while at work, but the pattern in this respect in the central area differs from elsewhere in that a considerably greater proportion of patients need to be admitted to hospital for this treatment and far fewer can be so treated and allowed to continue working. This, of course, is what is to be expected in view of the type of disease with which this clinic is coping.

The ignorance, prejudice and reluctance to co-operate which render the work so difficult and cause, on occasions, such advanced disease to be revealed when seen for the first time—these factors must be taken very seriously into account when any future development of the tuberculosis service in the city is considered. It is clear that for many years ahead, whatever happens elsewhere in the country, the fight against tuberculosis in the centre of Liverpool will require the sustained application of the well-known principles of case-finding, contact-tracing and energetic treatment which have proved so successful in the country as a whole.

*Dr. D. Osborne Hughes, from the East Chest Clinic, writes—*

During the year under review 306 patients were regarded as having recovered from tuberculosis and their names were removed from the Register, which at the end of the year numbered 1,549 patients of whom 121 were non-respiratory cases.

In last year's report the relative lack of improvement in males was noted, this year while the new male cases have fallen from 83 to 67, with a welcome reduction of 18 in sputum-positive cases, new female cases rose from 29 to 39 with an increase of 7 in positive cases.

The routine X-raying of school children found to be Mantoux positive at school continues and during the past year one child was admitted for treatment—examination of contacts failed to find the infecting case.

The value of routine B.C.G. vaccination of school children was shown recently when a married man with a family of ten children was found with bilateral disease and a positive sputum: fortunately four of the children had had B.C.G. vaccination at school.

In another case, a child was admitted to Hospital with primary tuberculosis: examination of her contacts revealed that her father had active primary tuberculosis and had been off work for some time—the connection between the illness of these two patients was not appreciated earlier because they had different general practitioners.

With the establishment of effective drug treatment for tuberculosis, the role of the clinic in the anti-tuberculosis campaign has grown in importance and it is therefore all the more regrettable that our health visitors' staff is at present only three instead of the normal five, and it is to be hoped that efforts to obtain replacements are soon successful.

The urgent re-housing of families of newly discovered cases of respiratory tuberculosis continues satisfactorily when necessary—more difficulty is often encountered in arranging transfers in cases where the family are already Corporation tenants.

Unemployment either under its own name or disguised as redundancy is becoming a growing problem, which must be regarded as part of the picture of Merseyside and not as a problem peculiar to the tuberculous.

The solution of this problem for our patients must therefore wait for a general reactivation of industry in the conurbation.

*Dr. William D. Gray, from the North Chest Clinic, writes—*

During 1962 new notifications of tuberculosis have remained similar at 97 as compared with 99 the previous year so that the marked decline in the new notifications recorded over the past few years seems to have come to a halt. It is a little disturbing to note that we are now getting adult-type tuberculosis occurring in children from tuberculous families who did not have B.C.G. because they had primary infections. These were observed to complete healing and yet five or ten years later they come back to us with new disease.

We still have a pool of 51 cases with positive sputums at home, eight of them with resistant organisms. This group continues to require a disproportionate amount of effort on the part of doctors and health visitors in seeing that they take treatment and in trying to persuade them to come into hospital.

Fifty-three died from pulmonary tuberculosis during 1962 but 24 of these were from other causes. This compares with the death rate of 59 in 1961, 31 from other causes. We examined 742 contacts this year as compared with 482 for 1962 which is a marked improvement and is mainly due to the strenuous efforts of the health visitors in seeking contacts not only in the family but at work. Five of these contacts were found to have tuberculosis requiring treatment. 340 children were given B.C.G. at the clinic this year and 190 at Walton Hospital. This compares with 200 in 1961 and 153 at Walton Hospital so that there is an over-all increase. Total number of tuberculin tests was 699 as compared with 691 in the previous year.



The total attendances of Liverpool patients during 1962 was 6,412 as compared with 6,455 in the previous year. 1,461 of these attendances were patients suffering from other chest conditions such as chronic bronchitis. This is an increase in the non-tuberculous work as during 1961 the comparable number was 1,205.

The tuberculosis register has declined by over 200 cases to 1,757 but then many old patients still prefer to come once a year for examination and X-ray. Continued vigilance is still necessary in view of the number of breakdowns occurring in the older age group and particular attention should, in our opinion, be given to contacts in the adolescent age group.

*Dr. F. E. Crawley, from the South Liverpool Chest Clinic, writes—*

During the year the number of notifications of non-respiratory tuberculosis was eighteen, identical with the previous year, but the respiratory notifications showed an increase of 28 over the figure for 1961. Of the 125 respiratory notifications 95 did not at any time show tubercle bacilli in their sputum and no inference can be made on these figures since some patients have been notified on a suspicion of active disease on criteria with which not all would necessarily agree.

Thirty, however, were sputum positive cases and this year the extent of disease was less on average than in the 28 sputum positive cases last year. On the whole it appears that there has been no evidence of reduction in the incidence of tuberculosis in this area during the year.

One sixth of the tuberculosis patients were removed from the register as cured during the year. As such removal is not permitted until the disease has been under control for a continuous period of five years, this again indicates that, compared with years not long past, the infections are in general of lighter degree and that treatment will produce a cure when properly taken.

Fifty-five patients died during the year. In only thirteen of these was death recorded as due to tuberculous infection against eight last year but even in these thirteen tuberculosis was, in some cases, certainly not the primary cause of death. There is still a lingering tendency to an assessment of "once tuberculous, always tuberculous".

During the year one of the new patients was found to have tubercle bacilli resistant to one or more of the first line drugs. Forty-three old patients were found to be positive during the year but fourteen of these showed resistance to one or more of these main drugs after failure to respond to lengthy treatment.

The routine examination of sputum by culture has brought to light in recent years the existence of pulmonary disease virtually identical with pulmonary tuberculosis but due to "anonymous" myco bacteria which are only distinguishable by elaborate laboratory tests. Often such infections are able to be eradicated by treatment with some drugs occasionally used in the treatment of tuberculous infection. As yet there is no certainty that such patients are infectious to their contacts.

Despite the fall in numbers on the clinic register there has been a slight rise in total attendances at the clinic over the year due to a considerable increase in the number of non-tuberculous patients referred for diagnosis.

On the advice of the Consultant Paediatrician at Sefton General Hospital, B.C.G. vaccination of newly born babies was not done due to recurrent outbreaks of infection in the nursery during the earlier months of the year.

Five hundred and forty-nine Mantoux positive children were referred by the School Medical Department but, though a few are being kept under observation, no active case was found among these in this area.

The health visitors continue to give their valued services in the clinic, ever willing to pursue all efforts in the interests of the patients. In some, particularly those whose patients live in the peripheral housing areas, much could be said in favour of making their travelling less of a tax on their time and on the power of their feet and I would strongly support any efforts to this end.

During the year there have been changes and absences in the staff of the clerical office due to resignations and illness but adaptability and interest in work have overcome difficulties which have been prolonged and the interests of the patients has been the overriding rule of work.

### Summary.

The position with regard to tuberculosis in Liverpool is encouraging in so far as the very large reservoir of infection which was present prior to the Mass Miniature Radiography Campaign has been greatly reduced. However there is no indication that the position has been reached that efforts to control the disease may be relaxed. This year's rise in incidence of new cases is a reminder of the need for constant vigilance in this field.



## VENEREAL DISEASE

### Incidence of Syphilis and Gonorrhoea

Until the last two years syphilis and gonorrhoea have been for all intents and purposes the same epidemiological problem. They have had the same pattern of occurrence in the community, have had the same channels of spread and it has not been unusual to find the two diseases concurrently in the same person.

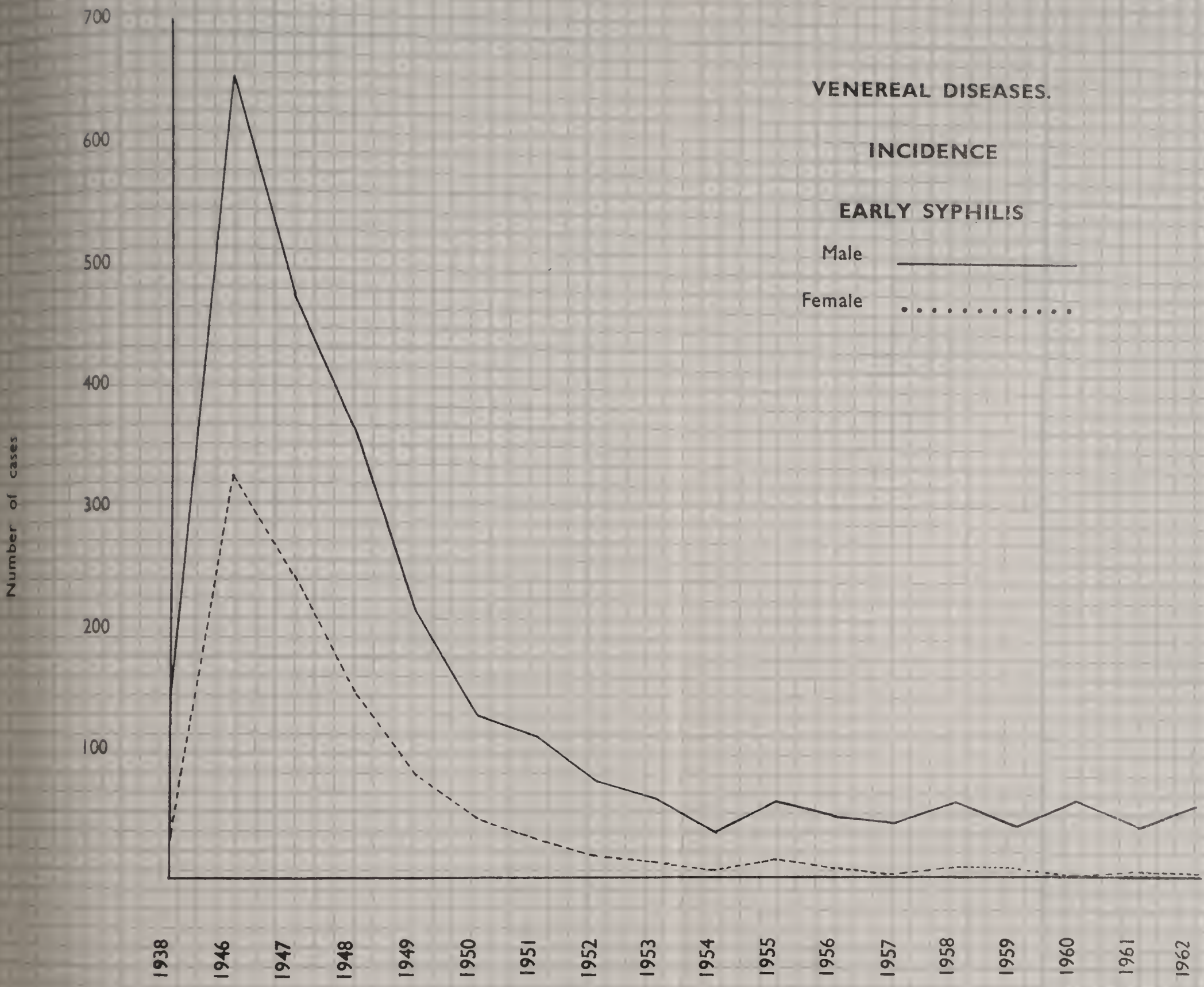
Since the 1946 peak in incidence both diseases have rapidly decreased and have remained at a low level with slight fluctuations since 1954. In the last two years there has been a small but definite increase in gonorrhoea but not a similar increase in syphilis. A feature of this increase is that it is confined to males, the female incidence being lower this year than last.

### Increase in Gonorrhoea

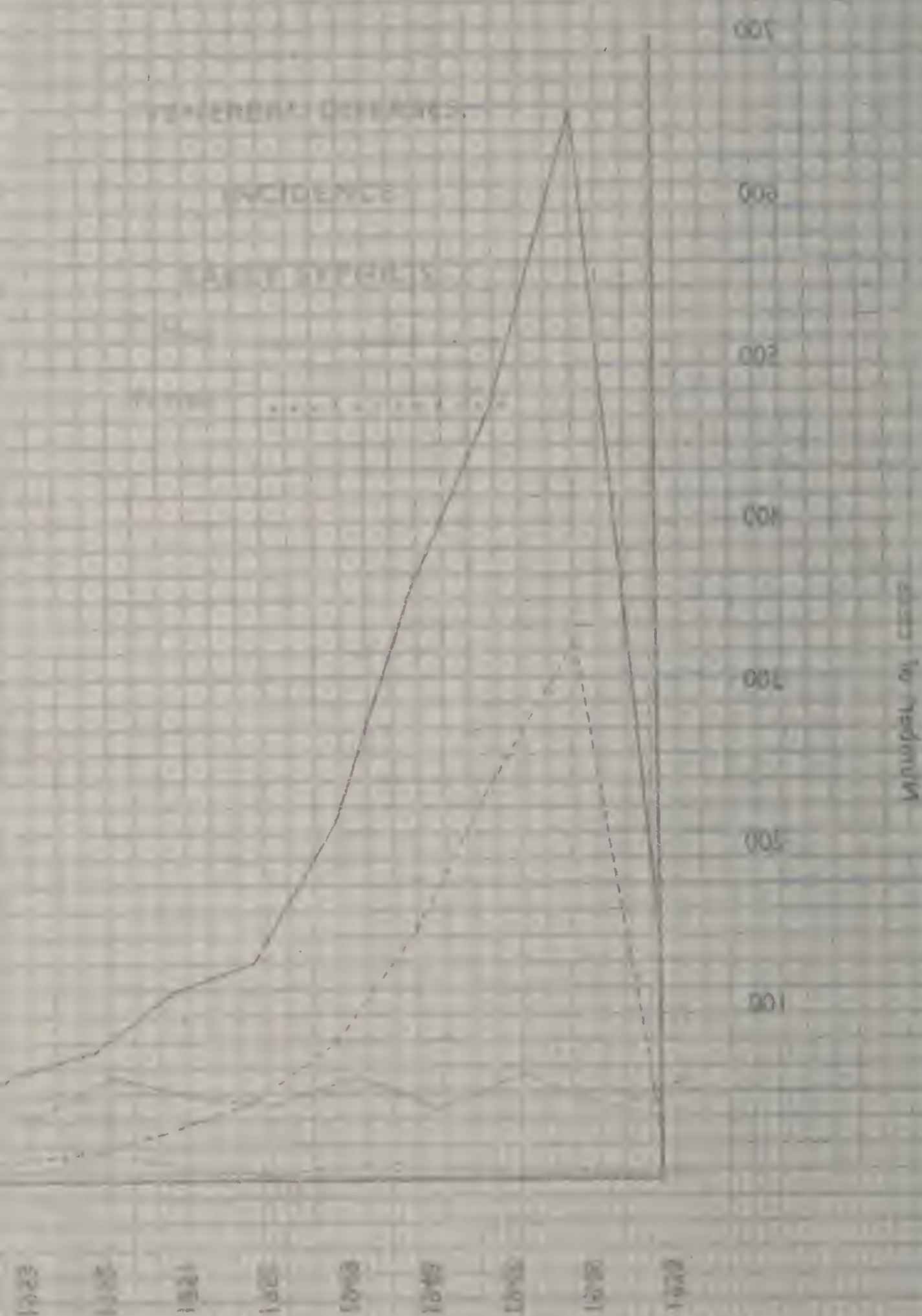
As may be seen from Table A, the increase is due largely to extra persons being affected in young adult life or late adolescence. It has become commonplace to talk of "teenagers" in relation to venereal disease. There is no good reason for regarding the young adolescent school child as forming part of the group which includes late adolescents and young adults. The two groups are quite distinct epidemiologically. In Liverpool there is not an unduly high rate among West Indian immigrants. In 1962 they constituted 14.4 per cent of the total incidence of the disease. Of these 8.8 per cent were non-residents, mainly seafarers, a problem inherent to any large port.

TABLE "A"

Incidence of Gonorrhoea	1958		1959		1960		1961		1962	
	M	F	M	F	M	F	M	F	M	F
Under 15 years ...	—	4	—	2	1	2	—	5	—	1
15—17 years ...	15	43	16	17	27	15	24	27	42	25
18—20 years ...	138	77	131	71	116	77	180	94	184	86
21—25 years ...	359	73	281	79	340	122	416	138	429	106
26—30 years ...	256	52	225	36	227	54	295	56	294	36
31—35 years ...	155	23	128	16	133	17	155	21	148	20
36—40 years ...	91	9	75	7	98	8	102	16	79	13
41—45 years ...	35	6	43	2	33	2	52	3	44	6
46 years and over	40	5	41	1	38	4	49	4	42	4
Total ...	1,089	292	940	231	1,013	301	1,273	364	1,262	297







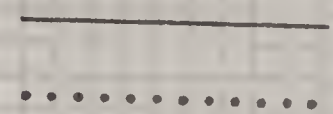
**VENEREAL DISEASES.**

**INCIDENCE**

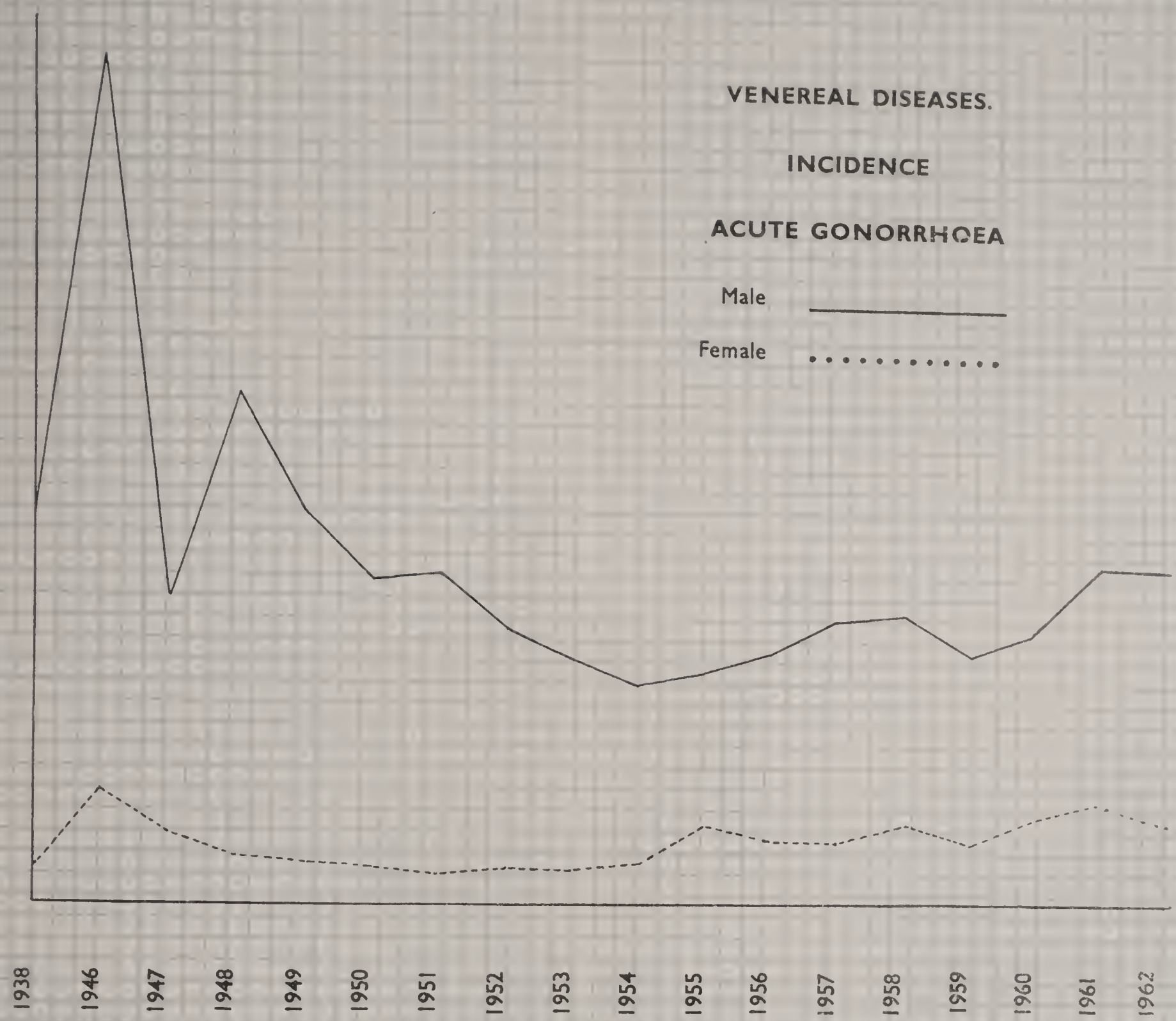
**ACUTE GONORRHOEA**

Male

Female



Number of cases





VENTRICAL DISEASES

INCIDENCE

ACUTE GONORRHOEA

Male

Female

000E

0000

0001

Number of patients



Success in contact tracing is dependent upon the patient's ability, or **Contact** willingness to provide the necessary information. This is often not forth- **Tracing** coming.

Table "B" shows the work done in contact tracing.

TABLE "B"  
VENEREAL DISEASE—CONTACT TRACING

	Males	Females
No. of reports of alleged source of infection ... ..	1	24
No. of cases traced and interviewed ... ..	1	11
No. of cases traced, not interviewed to date ... ..	—	1
No. of cases reporting at Clinic following interview ... ..	1	11
No. of cases in which information was passed on to another authority ... ..	—	1
No. of cases untraced ... ..	—	11
No. of visits carried out (home, lodging, club, etc.) ... ..	4	68

The default rate shows no significant change over previous years. Those **Defaulters** patients who subsequently default during investigation or surveillance following treatment, are written to or visited. The results obtained are shown in Tables "C" and "D".

TABLE "C"  
VENEREAL DISEASE—PATIENT DEFAULTERS

	Male	Female	Con- genital	Total
No. of cases written to ... ..	1,161	633	24	1,818
No. of letters despatched ... ..	1,183	1,040	35	2,258
No. of cases reporting in response ... ..	485	397	17	899
No. of letters returned by Dead Letter Office ... ..	101	27	—	128
No. of cases traced and transferred ... ..	14	2	—	16



TABLE "D"

## VENEREAL DISEASE—RESULTS OF HOME VISITS

	Male	Female	Con- genital	Total
No. of cases visited ... ..	451	327	8	786
No. of visits made ... ..	1,245	1,096	40	2,381
No. of cases attending following visits ... ..	138	178	5	321
No. of cases promising to attend but failing to do so	45	21	1	67
No. of cases removed or not known at address given	124	87	—	211
No. of cases not contacted, no access, away from home, etc. ... ..	115	15	2	132
No. of cases who refused to re-attend ... ..	17	19	—	36
No. of cases removed and transferred for follow-up	11	6	—	17
No. of cases deceased ... ..	1	—	—	1

Cases referred  
by ante-natal  
clinics

A total of fifteen cases were referred by ante natal clinics for further investigation of clinical or serological findings. The following table indicates the results of detailed investigations at the special clinic:—

TABLE "E"

## VENEREAL DISEASE—SUSPECT CASES REFERRED BY ANTE-NATAL CLINICS

	Late latent syphilis	Gonorrhoea	Negative tests	Total
Diagnosis following full investigation	1	1	13	15

Neo-Natal  
Cases

Seven cases of gonococcal ophthalmia neonatorum were transferred from maternity units for in-patient hospital treatment. In each case the infant was accompanied by the mother. In no instance had a mother attended a special clinic during pregnancy.

Examples of  
Contact  
Tracing

Whilst on a routine visit to one of the Liverpool clinics the Welfare Officer was requested to interview a new patient, a young married man, who was found to have primary syphilis. He was questioned as to the identity of his

extra-marital contact and found able to give precise information. This was immediately communicated to the Medical Officer of Health of the town where the contact lived. A reply was received that the contact had attended for treatment for early syphilis two months previously but had since defaulted. Following notification, she was re-located and brought in for resumption of treatment. The patient's wife, who was pregnant, was investigated and kept on extended surveillance following initial negative serology. Fortunately she remained uninfected.

A crew member, seen on board ship by the boarding Medical Officer, gave a history of symptoms, suggesting gonorrhoea, acquired at a foreign port. He was advised to attend at his local special clinic on arrival. His name and home address were passed to the V.D. welfare section for follow-up. Enquiry was made at the clinic 24 hours after the ship's arrival in port, and when it was found that the seaman had not acted upon the advice given, he was visited and persuaded to attend for investigation and treatment.



## MENTAL HEALTH SERVICE

**Introduction**     The year's work in mental health has seen further practical application of the principles on which the Mental Health Act, 1959 is based and, as a preface to this report, it may be useful to summarise those principles again:—

- (a) the treatment and care of mentally disordered patients should be regarded as part of the mainstream of the national health service and admission and other procedures should, as far as possible, be similar to those used for patients suffering from physical illness;
- (b) the use of compulsion should therefore be residual and, where needed, should be exercised by a method more acceptable than the old "certification", viz.: by medical recommendation (the way in which this was working formed the chief subject of criticism in last year's report and will be examined again later in this report);
- (c) there should be more emphasis placed on the importance of community care of the mentally disordered and less on their retention in hospital.

In common with all other local health authorities, the City Council was required to submit to the Minister of Health a scheme designed to establish a comprehensive community care service and in particular to provide visiting of patients at home, centres for training and occupation and residential establishments. During 1962 this was followed up by a request from the Ministry for submission of a "ten-year plan", to which allusion will be made in detail. The plan, which includes the other community services also, has now been submitted to the Ministry.

The development of the service poses problems in organisation and staffing and the Medical Officer would like to discuss these before going on to consider the work done under the various headings.

### Organisation and Staffing.

**Committee**     The Mental Health Service Sub-Committee, which considers matters apart from staffing, has had the benefit of the experience of advisory members, representing bodies interested in mental health, who have attended

regularly and shown the most lively interest in the proceedings. The different points of view they bring to debate cannot fail to help the elected members and stimulate interest generally.

The staffing of the service has always presented difficulties. In the past, **Mental Welfare Staff** in the absence of any national social work training scheme, mental welfare officers have usually been recruited from the staffs of psychiatric hospitals and they undoubtedly bring to bear valuable experience on certain aspects of the work, particularly where the use of compulsion is concerned. But the hospital ward is a very different place from the home, and hospital officers usually have no training whatsoever in social service in the community.

A mere increase in the amount of visiting will not of itself produce an integrated community care service and the Act obviously calls for new measures in staff training.

Nationally the social work training courses, set up as a result of the **Training of Younghusband Report**, are now gathering momentum and it has been **Mental Welfare Officers** agreed to second existing officers to them. There is, however, a limit to the number who can be spared for two years' absence and it will be many years before a qualified service can be obtained in this way.

In the meantime, the department has instituted its own training scheme. It has been agreed that up to a quarter of the establishment for mental welfare officers (26) may be recruited as trainees, and five of these are now receiving a thorough grounding at the hands of the senior officers of the service.

In-service training has so far included home visits and special duties with mental welfare officers for three months, two weeks at training centres and one week at the mental health centre. Visits of observation have been paid to other services, hospitals and organisations. Lectures and discussions on social services and psychiatric problems have been conducted by the senior mental welfare officer and by a trained psychiatric social worker. After the first three months the trainees were given a small number of cases to visit under the guidance of the "parent" mental welfare officer.

If the lines of training for social workers have been laid down satisfactorily on a national basis the same cannot be said for training centre staff—**Staff of Training Centres** a Committee which sat to consider their training has given no clear direction. The only qualification recognised at present is a diploma granted



by the National Association for Mental Health. Liverpool seconds two or three officers to the course for this diploma each year but it seems to be widely agreed that courses should be the function of a public body. The absence of such courses is perhaps not felt so much as in the case of mental welfare officers—in-service training produces good practical results—but as centres grow in number and scope the problem will become more and more urgent. The training of staff of adult centres and workshops, also, has not been faced nationally and types of staff and conditions of service differ widely over the country. We in Liverpool are particularly interested in this as the development of workshops is an important part of our mental health plan. The three industrial units opened at New Hall during the year are staffed by men of widely differing backgrounds and we are fortunate in that they have been welded together as a successful practical team, even though they had no previous experience of dealing with the mentally disordered.

Much more could be said about staffing problems—in staffing hostels, for example, we are likely to be in competition for staff with other residential services—but perhaps at this stage it is sufficient to remind the Committee that though much remains to be done, every effort is being made with the means at our disposal to provide a truly comprehensive mental health service.

The establishment for visiting and training staff as at 31st December was as follows:—

Establishment	Mental Welfare Staff		Training Centre and Workshop Staff			
	Title		No.	Title		No.
	Superintendent Mental Welfare Officer ... ..		1	<b>Training Centres—</b>		
				Senior Supervisor ... ..		1
	Deputy Superintendent Mental Welfare Officer ... ..		1	Supervisors ... ..		6
	Senior Mental Welfare Officer ...		1	Senior Assistant Supervisors ...		6
	Mental Welfare Officers (including up to six trainees) ...		26	Assistant Supervisors or Trainee Assistant Supervisors ...		23
				<b>Industrial Units--</b>		
				Senior Supervisor ... ..		1
				Senior Assistant Supervisors ...		3
				Assistant Supervisors ... ..		9

### Community Care.

Each mental welfare officer has a "case-load" of upwards of 100 mentally **Home Visiting** disordered people under his or her care. The vast majority consist of (a) mentally ill people discharged from hospital but needing care and advice on their return home, and (b) mentally sub-normal people. A small proportion will be people who do not need or who refuse to have treatment in hospital and for whom support may be useful during a critical period.

With these last the mental welfare officer is clearly carrying out a "preventive" service but he is in fact doing the same for his "after-care" cases—trying to prevent a relapse by his visits and advice.

"Prevention" in relation to mental disorder has a wide connotation; it not only concerns all the social services—housing, maternity and child welfare, education, and so on—but as the psychiatrist well knows, the search for causes often takes us into the most recondite aspects of the patient's life; and the ripples may widen still further from the individual to the group, to the nation, to world events.

The term "prevention" is therefore one which the mental welfare officer is chary of using. Most often by the time a patient is referred to him a life has been shaped and neither he nor the psychiatrist can reverse basic personality that the inexorable years have produced.

The mental welfare officer's modest claims are that from his training and experience he understands the patient's mental condition and can explain it so that relatives understand equally well; that if the condition deteriorates he can arrange treatment immediately; and that he does everything possible to prevent a relapse by advising, helping, giving friendship and support. He must know all the social agencies and should have community projects such as the mental health centre (discussed later) to turn to for co-operation.

Nor are his aims very different for the mentally sub-normal—he is aware of limitations and tries to see that within them the patient has as full a life as possible.

In this context we can consider one or two patients dealt with in the year, during which a total of 16,770 home visits was made.

Mr. A, now 36, was an only child. He was above average intelligence and obtained admission to University but shortly before his final examination he broke down and spent a short period in a psychiatric hospital. He



recovered, however, and was able to resume his studies and obtain a B.Sc. degree. After working for a few months he broke down again and re-entered a psychiatric hospital as a voluntary patient. This time his stay was prolonged for six years and when he was discharged in 1959 it was as "relieved" not "recovered". The diagnosis was schizophrenia.

Mr. A's father then bought a shop for Mr. A to manage and gave good reports of his progress but the mental welfare officer did not share his optimism, finding the patient "dull and with little initiative". By 1961 the shop had failed and the father asked for help in finding Mr. A more suitable employment. The Ministry of Labour placed him on the professional and executive register but he was unsuccessful in interviews for posts in keeping with his qualifications.

The mental welfare officer continued to pay frequent visits and keep up a search for a type of employment with which Mr. A might be able to cope and which at the same time might satisfy him.

During 1962 a post as laboratory technician was found for him and he has been able to hold this for six months. The prospects for the future are at least brighter than they have been for a number of years.

There is nothing very dramatic about this case; the seeds of this patient's illness were sown long before the mental health service came into the picture and the diagnosis makes it clear that a further breakdown is not outside the bounds of possibility. The service, however, will continue to support him in any way that is required.

One of the most bulky files in the records section is that of Mr. B, aged 36, a married man with seven children, known to the service since 1954, when he was compulsorily admitted to hospital following a suicidal attempt. His previous history was of ordinary schooling, four years war service, subsequent labouring jobs and unemployment, and a reasonably happy marriage up to 1952 when he started drinking heavily and was convicted more than once for being drunk and disorderly. He had developed feelings of guilt and persecution with acute depression.

The tragic story is that of a chronic alcoholic and drug taker. Basically, Mr. B's personality is psychopathic—inadequate in the first place to meet the ordinary demands of family life, he has deteriorated over the years and now presents a pathetic picture of maudlin self-pity on the one hand, and dangerous lack of control and menace to his family on the other.

He has been admitted seventeen times to psychiatric hospitals since 1954, including fourteen times by compulsory procedure arranged by the mental health service, but has nearly always become "informal" and been discharged "relieved" or discharged himself after a very short stay, even though his wife feels that he needs a longer period of treatment. (A note on this aspect of "compulsory" and "informal" hospitalisation will be found towards the end of this report).

It seems that neither hospital treatment nor community care can succeed in bringing about any permanent improvement in this case.

What therefore has the mental health service done for this patient? Mrs. B has been able to get support and advice during her husband's absences and quick action when his conduct has become intolerable. Beyond this, very little has been achieved—rehabilitation by employment has been found impossible—Mr. B was only interested in jobs beyond his capabilities and his good intentions towards his family are overborne by his addiction to alcohol.

It would seem that for the sake of this patient and his family the only satisfactory solution at the present time would be prolonged compulsory stay in hospital in the hope that eventually some lasting improvement could be achieved. Without this, the mental welfare officer can only continue to visit in order to give some support to the wife and family.

The fact should be faced squarely that in some cases community care has no measurable results and the officer's time and energy are apparently wasted. The officer must learn to accept his role as a watchdog in the patients' interest without necessarily expecting progress or gratitude.

A feature of the year's work has been the wide variety of sources from which patients are now referred. As regards social agencies there is no doubt the mental health service is now "on the map"; it is pleasing to record for example that the personnel officers of industrial concerns are making increasing use of the service on behalf of their work-people.

**Sources of  
Reference**

In no field of social service has there been more progress recently than in the care of the mentally sub-normal, and the old accusation that they are the forgotten part of the community is certainly no longer true.

**Visiting the  
mentally  
subnormal**



Opening of new training centres, increased attention to home visits, short-term care, work schemes and hostels are all evidence of the interest of local health authorities; and if any of them are in danger of forgetting their responsibilities, vigorous voluntary societies are at hand to remind them.

During the year, 92 children were referred as being unsuitable for education in school and it may be useful to see how the mental health service has acted. In all cases the parents have been visited at home and advised about their child in particular and about the problems of mental sub-normality in general. This is a very distressing period for a parent—when a child is considered too backward to make progress within the educational system—and much tact is needed on the officer's part. Parents may feel that the only solution is a form of institutional care and the pros and cons of this must be discussed (and also the likely delay before a child can be admitted to such care). Hospital care was, in fact, requested for thirteen of the children referred and, of these, only four had been given vacancies by the end of the year.

In the majority of cases, however, the parents' chief concern is that the child shall stay at home and receive proper training and the ideal is for a vacancy to be given at a training centre immediately. For reasons which will be discussed under the appropriate heading we still fall short of this ideal, but 57 of the children referred did enter day training centres and 24 are on the waiting list for early admission.

Interest in the capabilities of subnormal adults is growing also and the encouraging progress being made in sheltered workshops will be discussed. Apart from the "ineducable" children reaching manhood and womanhood the service has referred to it many children as they leave special schools. Some of them obtain employment immediately and if they, or their parents, feel that the mental health service is not needed, we cease visiting. It may be thought that continued supervision could be of great value, especially during the period of adolescence, but it is also a great thing for a young man to stand on his own feet; perhaps we may spare a thought for those who, though mentally subnormal, manage to carve a niche for themselves in the community and whom we never hear of again.

#### School Leavers

In this connection it is of interest to consider the results of an enquiry made into the progress of 130 mentally subnormal school leavers referred to the service five years ago. At 31st December, 1962, the position was as follows:—

Fifty-three were still being visited (including 35 employed, nine at sheltered workshops and nine unemployed).

Seven had been admitted to hospitals for mentally subnormal (including three after Court proceedings), one was in prison.

Seventy had ceased to be in touch with the service for the following reasons: 24 employed, thirteen refused visits, eight married, 25 left Liverpool or otherwise lost trace.

Too definite conclusions should not be drawn from these figures. The service has lost touch with over half in five years but many of these are success stories. The welfare officer who visited them may wish he was still at hand to help and see they were not exploited because of their handicap but he realises that enforced visiting would be neither acceptable nor, indeed, useful. He realises also that, despite all efforts, the service is powerless to help in some cases. Let us take the case of James, the man (he is now 21) shown in the above figures as in prison. He is serving a three years sentence for stealing. On leaving special school at sixteen James' mental age was about  $9\frac{1}{2}$ . He could not write but could read a little. His mother, a coloured woman, widowed, with eight children, refused to have anything to do with the mental welfare officer who visited the poor and overcrowded home; she did not believe that James was "backward".

Within three months he had been found guilty of larceny and placed on probation for two years. Mother was now more favourably inclined to receive the officer who, however, had no time to make any impression as James committed another offence and was sent to a farm school. Back home in 1961 he almost immediately committed the offence for which he is now serving his sentence.

The officer will, of course, do everything he can when James comes home again but in this case mental handicap, temperament and background all combine to make the task difficult.

For comparison with the school leavers the progress of the group of children referred as "ineducable" in 1950 (who are now between eighteen and 26 years old) has been studied. These are of course the lower grade of the subnormal and the enquiry shows a very different result.



Of the group of 86 referred 31 are still under supervision (eleven of them attending training centres) but 30 are in hospitals for the mentally subnormal, ten have died and contact has been lost in only fifteen cases, most of which have left Liverpool.

### Training Centres and Workshops.

Number of  
Centres and  
type of  
people  
attending

The provision made for training and occupation of mentally disordered people is shown statistically in Table 36. There are now five children's training centres (320 places), one adult training centre (60 places), and three sheltered workshops (180 places), giving a total of 560 places available. Two years ago there were three centres which, crowded above optimum capacity, accommodated 300. The considerable increase is of course the result of the opening of the New Hall centres.

The Committee has statutory responsibility for the training of children who are so subnormal as to be unsuitable for education in school and it is this class of child who occupies practically all the places at the junior training centres. Children suffering from mental illness are usually catered for within the education system, with its facilities for clinic and other treatment and it is rare indeed for such children to be referred as "unsuitable for education".

The adult training centre is mainly attended by the more backward of the children transferred from the junior centres on reaching the age of sixteen and until the opening of the sheltered workshops at New Hall this was the only occupational facility for adult subnormal people in the city. The adult centre also serves to assess the suitability of the "trainees" for transfer to the sheltered workshops.

Workshops open up a wider field of opportunity for adults. The three now operating are occupied by "graduates" from the junior centres together with a few who have passed through special schools—in other words the mentally subnormal and severely subnormal. Mentally ill people are being catered for separately at the Johnson Street mental health centre and the Rumney Road centre, with excellent results as will be shown later in the report. How far the two classes—the mentally ill and the subnormal—should be assimilated is a question which is under constant consideration as sheltered workshop provision grows.

The training of children has continued along the usual lines during the year and has been rendered more efficient by the disappearance of the overcrowding at the older centres consequent on the opening of New Hall. **Training at Junior Centres**

One of the main problems is the demand for places for children of very low grade and those who have severe physical handicaps in addition to mental subnormality. These children need special attention which can best be given in separate units or classes and it is planned to have such classes at each of the junior centres. The centres have, in fact admitted a number of such children but the classes cannot operate fully until door-to-door transport is provided.

Details of a scheme to provide such transport for all types of handicapped people in whose welfare the Health Department is interested will be found elsewhere in the report. As regards the mentally sub-normal (adults as well as children) the benefits it can bring are enormous—not only will children be able to attend the centre who are at present confined to their own homes but also those mothers who suffer such hardship and embarrassment in taking crippled children to the centres will get well deserved relief. The scheme was approved in principle and though shelved for financial reasons in 1962, has every prospect of starting next year.

In asserting the need for door-to-door transport for some it should not be forgotten that there is already an extensive service of special buses. Seven of these serve the centres and workshops (as compared with one in 1950) and adequately meet the needs of the majority. Free tickets for travel on public transport are also given to suitable adults to encourage independence.

One further comment is called for about children's training—the Liverpool Society for Mentally Handicapped Children is successfully sponsoring a centre—the Dorothy Keeling Special Care Unit—which takes some children for whom places cannot yet be given at the department's training centres. The Health Committee paid a visit to the Unit early in the year and decided to make a grant to the Society of half the cost of each child's attendance. The Medical Officer would like to pay tribute here to the Society for their enterprise in organising this service.

Perhaps the most interesting development during the year has been the immediate success and consequent extension of the sub-contracted work scheme at New Hall for mentally subnormal adults. The off-centre location of New Hall at Fazakerley, which has its disadvantages as regards transport, **Training of Adults**



etc., proved to be convenient in one respect—a firm with premises almost adjacent gave the opportunity to start the scheme by providing regular work, involving a process in the making of cartons, which even quite low grade people have been able to do. The proceeds of this and other work subsequently obtained amounted to over £2,500 for the year, which has been distributed to the workers without deduction. An average of 160 people are now receiving a pay-packet each week and the boost this has given to morale and self-respect marks a really important step forward in the department's social welfare activity. A third centre had to be used in addition to the two originally opened for this purpose and such has been the response that all three are now full.

The success of the scheme confirms what much research done in recent years into the capacity of severely subnormal people has suggested—that they have been greatly underrated in the past and that they can play a fuller and happier part in the community given the sympathetic environment which is now being developed by many health authorities. It was obvious that in Liverpool further progress was called for—the three centres at New Hall, though satisfactory for the forms of sub-contracted work undertaken, did not provide room for expansion. A scheme for a purpose built workshop was therefore submitted and approved and at the end of the year detailed planning was in progress. It will be built on land within the New Hall area and will cater for approximately 350 mentally disordered persons. When opened, it will enable the three centres now in use to revert to training centres, one probably for adults and the other two for children. It will, of course, be part of the vast overall mental health scheme for New Hall and will cater for people living in the adjacent hostels and some mentally ill people living at home as well as those already attending.

It is felt that sub-contracted work can form almost an ideal means of employment but with the large numbers involved no doubt it will be necessary to go in for manufacturing processes also. We may expect in the next few years to find interest continuing to grow in the potentiality of the subnormal and the department may have to face new problems in organisation, management and marketing.

Altogether the progress made in the year in provision for the mentally subnormal can be viewed with satisfaction. There remains a small waiting list for attendance at centres but we should shortly reach the position for

the first time of being able to offer vacancies for children as soon as they are excluded from school; for adults further expansion now waits until the workshop is ready.

### **Mental Health Centre.**

The mental health centre, Johnson Street, was opened in December, 1961 **Johnson  
Street  
Centre** and this report thus covers the first full year of working. It caters for mentally ill people, mainly those discharged from hospital but also others who do not want or do not need to have hospital treatment. Mental welfare officers are able to refer patients on their lists and see for themselves the progress made.

A much smaller group is involved than those under training in the centres for the mentally subnormal and it is important to realise that in most cases training has a different object—for the mentally ill rehabilitation rather than occupation must be the guiding motive.

Patients of widely differing abilities and temperaments attend. Some have been at home completely idle and never going out, some can only concentrate for a few minutes, others, though of average intelligence, are poor in performing practical tasks. It can be appreciated that it is not easy to devise a programme in which these disparate elements can be welded but by trial and error a daily routine has been established, the success of which can be judged by the very regular attendance and busy, purposeful atmosphere now existing.

All patients are started on simple tasks, under careful supervision and observation, and progress to more difficult work as they gain in confidence. Their confidence is also improved by such activities as shopping for the midday meal and cooking it.

Mornings are given over chiefly to productive work which is sold and the profits allocated to the patients. In the afternoons such activities as dancing, discussions and quiz games, play readings, hairdressing and beauty culture for the ladies, cooking for men who live on their own, etc., are all designed to encourage qualities that have often been lost—concentration, pride in appearance, interest in the outside world, above all self-confidence and the ability to mix with others.

A well-attended weekly evening club is held at the centre, outings are made to places of interest and a very successful feature was a week's stay



at a holiday camp in North Wales when sixteen patients, supervised by two occupational therapists, had an excellent time, joined in communal activities and benefited greatly in health.

In running this centre, there is, of course, the problem that has been discussed earlier in connection with supervision of other patients—sometimes those who could benefit most cannot be persuaded to attend; but unless attendance is voluntary it can do no good—we can only ensure that every encouragement is given. Not every patient wants or is suited to the daily communal activities but the attendance and enthusiasm show that the centre is filling a real need.

### Short-term Care.

A useful part of the community care service is to obtain short-term care for a subnormal child or adult, enabling the parents to have a respite from their care. It is especially useful in the case of those parents who, because of a sense of duty and/or affection will not consider extended hospital care.

A particular point was made this year of encouraging such parents to take advantage of the service but the demand was not appreciably increased; for some years it has been maintained at a fairly steady figure.

Children up to twelve years of age are usually accommodated at the voluntary home, Orchard Dene, and no case was refused admission there during the year. For adults and older children accommodation is more difficult to obtain—Regional Hospital Board hospitals provide most of the places but often they can only give short notice and in consequence parents cannot make holiday plans well in advance. Nevertheless the help given by hospitals is greatly appreciated and, as can be seen from the following figures, they accommodated more than half the total patients given this form of care:—

	Orchard Dene		Other Voluntary Homes		R.H.B. Hospitals	
	No.	Weeks stay	No.	Weeks stay	No.	Weeks stay
Children ... ..	55	103	8	26	32	64
Adults ... ..	—	—	6	15	59	175

### Hostels.

As part of their community care for the mentally disordered, local health authorities can, under the Mental Health Act, provide residential hostels for patients who do not need hospital treatment but are unable, for one reason or another, to live at home.

It is planned to provide thirteen such hostels in Liverpool for about 150 people by adapting existing buildings on the New Hall estate. In addition small hostels will be opened on Corporation estates after the New Hall hostels are completed and occupied.

Progress on the New Hall project has been somewhat slow but a contract for the first of two phases into which the work of adaptation has been divided, had been placed just before the end of the year. It will probably be about two years before the first patients can be accommodated.

### Hospital Patients.

In the preamble to the hospital plan for England and Wales presented to Parliament in January, 1962 it is stated that "any plan for the development of the hospital service is complementary to the expected development of the services for prevention and care in the community".

Complementary  
development  
of Hospital  
and  
Community  
Services

The Liverpool Regional Hospital Board's section of the plan states that it is proposed to reduce the number of beds in psychiatric hospitals by 1975 from the present 8,000 to 4,500 (rounded figures). Places for the mentally subnormal will, however, be increased. From these figures it can be inferred that the community services for the mentally ill provided and to be provided by the City Council are expected substantially to reduce the demand for hospital care.

This relation between hospital and community care is a very controversial one. Whilst the Health Committee's proposals for community care are wide and far-reaching it is felt that we have not sufficient experience to measure the extent to which they can *replace* rather than supplement hospital care.

The Medical Officer will do no more than make these general remarks in the present report but the position will need careful observation as it develops, to ensure that community services are, in fact, able to make better provision for the patient before hospitals are closed or hospital services reduced.



We may now consider the activities of the mental health service which impinge on the work of hospitals and how they have been carried out during 1962.

Shortage of hospital places for mentally subnormal

Taking first the mentally subnormal the perennial question of shortage of places in hospitals has again been raised and at the end of the year arrangements had been made for a deputation to meet the Regional Hospital Board once again. The position is by no means so desperate as it was some years ago but with 43 patients on the waiting list in the top urgency category continued pressure is well justified. The situation must be viewed in the light of the Board's plans to expand accommodation and continued improvement may be expected.

Admission of mentally ill to hospital

Turning to the mentally ill the emphasis on the role of the mental health service in community care must not lead us to forget that one of the most important parts of its work continues to be the arranging of hospital admissions. This subject was discussed in great detail in last year's report as it was felt that the intentions of the Mental Health Act were not being realised in practice. Experience during the past year has borne out the points then made and no apology is needed for returning to the subject here.

The first cardinal principle of the Act is that the use of compulsion should be residual, i.e. if a person is willing (or not unwilling) to enter hospital he should be able to do so informally. How far this has been followed can be seen from the figures below showing compulsory admissions for two complete years before and after the Act.

	Patients referred for possible compulsory admission	Compulsory admission to Hospital		
		Emergency	Other	Total
1958 ... ..	1,353	865	19	884
1959 ... ..	1,324	856	28	879
1961 ... ..	1,217	944	129	1,073
1962 ... ..	1,450	1,117	70	1,187

Substantially more people are thus being compelled to enter hospital (albeit by a less objectionable procedure) under the new Act than under the old. It should be mentioned also that 102 of the 1962 total admissions were people over the age of 70 and again this proportion is higher than it was under the former legislation. **Increase in compulsory admissions**

It is permissible to wonder whether there is a contradiction between medical practice outside and inside the hospital in that, whilst compulsory admissions go on increasing, it would seem that a large number of these patients are being made "informal" soon after admission and are then taking their discharge before treatment is completed.

It has been specially noted this year that substantial numbers are coming to the mental health service for community care when such care cannot be adequate; the consequence is their early re-admission to hospital. Compulsory admission at frequent intervals was surely not envisaged by the Act for the effect must be detrimental to the patient and his relatives, however attractive early discharge may seem.

A possible way of improving matters would be for the responsible hospital medical officers to use powers they have under the Act (Section 39) to grant leave of absence to patients, with power to recall them if necessary. This would be welcome from the point of view of the mental health service if it were used also in the case of the mentally subnormal discharged from hospital.

The second principle of the Mental Health Act which is not being entirely carried out in Liverpool despite the efforts of the mental health service is the provision of a *comprehensive* service—for the good reason that the service has no knowledge of large numbers of patients discharged from hospital. These are informal patients of whom it is natural to assert that they themselves should be the only arbiter of their future. Nevertheless it is a fact that many patients discharged from hospital are *not* recovered and the first intimation the mental health service receives is a request for arrangements to be made for their readmission. **Non-notified discharges**

The balance between the patients' liberty of action and his need of care is a delicate one but it is suggested that it would not be disturbed unduly if the mental health service had to be notified of all discharges. While the former legislation remained in force it was the practice in Liverpool for a mental welfare officer to visit every patient discharged and in a very large



proportion of cases ex-patients were glad to talk to the officers and accept their help even if, before discharge, they had stated they were not willing to have after-care. The officers are willing to accept the chance of rebuff in a few cases for the sake of helping the many and though "compulsory" after-care is not feasible or desirable, notification of discharge and detailed consultation in all difficult cases would seem to have advantages for the patient far outweighing any other consideration.

Efforts are being made to extend the area of co-operation with the hospitals and the Medical Officer hopes it will be possible to report an improved state of affairs in his next report.

**Patients  
referred  
during the  
year**

Table 37 gives details of the action taken by the mental health service in dealing with the 2,606 mentally disordered persons referred to it during the year. Approximately half the references are made by doctors and others with a view to the service making arrangements for compulsory hospital admission.

Such references are always treated as urgent; during the day two officers are specially assigned to this duty on a weekly roster and at night one officer performs the duty, on a weekly roster also. Half way through the year the night-duty headquarters was transferred from New Grafton House to the mental health service office at Johnson Street. For this second six months figures of night duty have been kept which show that the night officers dealt with 383 cases and arranged the admission of 305 of them to hospital.

### **Ten-Year Plan.**

**Ten Year  
Plan**

The main lines of development of the mental health service to be embodied in the ten-year plan mentioned at the beginning of the report can be inferred from the foregoing pages.

The New Hall project which should be completed within five years will be one of the largest and most comprehensive schemes in the country, containing within a pleasant and open area residential hostels, training centres for children, workshops, occupational therapy centre and social club, with other amenities including playing field and a swimming bath.

Apart from this, new centres are planned to replace old and out of date buildings, private houses will be built in the city for use as hostels and the home visiting service will be extended. Though these developments are still in the planning stage the report will have shown that the projects already started are proving their usefulness and that the service has had a busy and interesting year.



## AMBULANCE SERVICE

### Case load of Patients

The total number of patients carried by the ambulance service amounted to 251,818 compared with 240,032 in 1961 an increase of 11,786.

The ambulance vehicles travelled 988,487 miles using 43,613 gallons of petrol and 11,966 gallons of diesel oil. When compared with 1961 this shows a decrease of 26,339 miles and a reduction of 4,558 gallons of fuel. This is the first time in the history of the service that there has been a decrease in mileage with, over the same period, an increase in the number of patients carried. This has been brought about largely by the introduction of hospital transport officers who are able to coordinate journeys and, through liaison with ambulance control, avoid a possible duplication of mileage thus adding to the efficiency of the service generally.

There can be no doubt that this continued increase in the demand for ambulance transport makes the avoidance of any abuse of the service more difficult and the full co-operation of all hospital departments in the City in the rigid application of the recommendations of Ministry of Health circular 30/51 has been of great assistance in this matter.

### Communications

To meet the increasing demand for ambulance transport the communications equipment was altered completely from two P.B.X 10 x 50 switchboards to a new type of equipment recently introduced by the G.P.O. namely "Key and Lamp units". This equipment enables calls to be attended to much quicker and speeds up the deployment of emergency and general cases to the out stations. The new system allows for all emergency calls received to be passed to the nearest accident ambulance station and in the case of a large scale emergency, every ambulance station, the police, the emergency bed bureau, and hospitals are alerted simultaneously. In addition individual hospital transport officers can communicate with each other and at the same time the control staff can listen in to the conversation. This permutation of the equipment is a great asset in that all personnel concerned have up to the minute information and yet conversations are kept down to a minimum.

Details of emergency calls received for 1962 are as follows:—

**Details of Accident/Emergency Calls Received During 1962**

	(A)	(B)	(C)
Month	Calls	False calls with good intent	(Malicious) False calls
January ...	1,648	82	10
February ...	1,495	63	5
March ...	1,693	92	5
April ...	1,718	76	12
May ...	1,721	83	12
June ...	1,730	84	15
July ...	1,739	73	16
August ...	1,745	76	4
September ...	1,733	85	11
October ...	1,697	88	6
November ...	1,713	83	16
December ...	1,863	117	4
Total ...	20,495	1,002	116

Please note the following points:—

- (1) The totals in Column (A) are the *full* totals of all Accident/Emergency Calls.
- (2) Column (A) *includes*, therefore, the totals in both Column (B) and Column (C).

The desirability of encouraging staff to train to a better standard in first Staff aid continued throughout the year; four first aid classes were held, 57 members enrolled and 100 per cent successful results were gained. Six driver attendants sat for the final examination of the Institute of Certified Ambulance Personnel and three were successful. In addition fourteen driver attendants enrolled for a course in preparation for the intermediate examination to be held in April, 1963.

The staff of the service consist of:—

- 1 Chief Ambulance Officer
- 1 Assistant Ambulance Officer
- 1 Senior Controller
- 4 Controllers
- 4 Assistant Controllers
- 4 Telephone Operators
- 6 Hospital Officers
- 3 Station Officers
- 2 Clerks
- 1 Copy Typist
- 1 Storekeeper
- 12 Shift Leaders
- 138 Male Driver/Attendants
- 18 Female Driver/Attendants



Vehicles

The vehicle fleet now totals 76, consisting of 43 ambulances, 27 dual purpose vehicles and six sitting case cars. At the end of 1962 the ages of the vehicles were as follows:—

Age of vehicles in years	Under 1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	Over 10
	10	7	12	8	1	6	5	10	3	7	7

During the year ten new vehicles were purchased, seven stretcher case ambulances and three dual purpose vehicles.

The transport of infectious patients continues to be dealt with by a separate staff and vehicles operated from the Westminster Station. Details are given in Table 40, in the Statistical Appendix.

The outstanding feature of the infectious service during the year, was the opening of Sankey Isolation Hospital near Warrington which will receive smallpox cases from this area. Whilst the transport of smallpox cases is, fortunately very rare, a rigid procedure has been applied to cover any eventuality, additional special clothing has been provided and in co-operation with the hospital a rehearsal was arranged which proved very successful and highlighted many of the difficulties facing an ambulance crew conveying this type of case.

## OCCUPATIONAL THERAPY

In May 1962 it was at last possible to replace a member of the domiciliary **Domiciliary Service** staff, who had resigned in July 1961. The difficulty in getting domiciliary staff is largely due to the fact that most members of the profession find it impossible to purchase and maintain a car on the Whitley Council salary, which was intended primarily for staff working in hospitals. There was some difficulty in picking up the threads of work left so long, this has been done and once again the whole of the city is being covered by the domiciliary staff. The accent is increasingly on aids to daily living activities for the disabled, and requests are always being received to help patients, who have been inactive for months and sometimes years, to regain a measure of activity and independence. Some concern has been felt for badly handicapped people living in very small houses where the use of a wheel chair is impossible, and the staff have been experimenting in making an easily moved and compact chair by putting Shepherd castors on tubular steel framed chairs. This made a very free-moving chair, but caused some concern as it would not hold steady while the patient got on to it. After much trial and error two members of the staff have invented a braking system which has solved this problem.

A young housewife, with two small children, severely handicapped **Domiciliary Case** with arthritis, had been in bed many months because she was unable to walk. All her muscles had become flaccid through inactivity, and the patient was extremely depressed. Exercises for back, shoulder and arm muscles were given through the medium of weaving, and the patient was encouraged to start dressing herself and to take an interest in her appearance. After a few months she was able to sit up in a chair for a few hours a day, but all efforts to help her to walk had failed. This patient had by this time become interested in her family and surroundings again and longed to do jobs about the house. An ordinary wheel chair was too large for the house and so a chair on wheels was supplied and the patient was able to scoot herself about. Unfortunately, complete independence is impossible, due to steps and the absence of indoor sanitation, but the patient has reached a measure of independence unthought of a few months ago.



### Home Nursing Aids

Many requests for nursing aids are investigated by the Occupational Therapy section, which combines with the Home Nursing section in trying to provide the best equipment for the patient. The largest single item is requests for walking aids. Each request requires a visit and at least one follow-up visit when the aid has been issued, but often these result in further help and advice being given on aids to independence. A small walking frame has been made for a child of seven, who for some years has only been able to walk by holding on to the furniture. It is hoped that when she has learned to walk with the frame a place will be found for her in a special school. As usual there have been a number of requests for bath aids, chiefly from old people who find the baths in the modern pensioner's flats impossible to get in and out of. There are no hand-holds because the sides of the baths are filled in and they are often too high for old people to step into without a steady hand rail.

### District Nursing Service

During the year the Occupational Therapy staff have been working closely with the District Nursing service, chiefly in trying to assist the nurses with equipment for helping them to lift very heavy and awkward patients. The need for hoists is increasing and this is probably due to the large number of completely helpless patients now being nursed at home. The district nurses and the relatives of the patients find it a great strain to be continually lifting these patients and the provision of a hoist often means the difference between a patient staying at home or being kept permanently in hospital. A hoist is by no means the answer in every case, and a great deal of thought and experiment will be necessary before a satisfactory answer is found to some of the difficult cases. Much of the equipment required for patients has to be made by the therapists themselves and this is often time consuming and requires technical skill sometimes beyond their powers. It is hoped that it will soon be possible to employ a technician who would not only relieve the therapists of some of these tasks, but would be invaluable in teaching technical skills to selected male patients.

### Occupational Therapy Unit

The Unit in Rumney Road is continuing to do a good job in rehabilitating patients and during the year a number have gone on to the Ministry of Labour for further training. Other patients, who have been confined to their homes for years, convinced that they could not do anything, have found a new interest in life and have been taught new skills appropriate to their disability. An Oliver rehabilitation machine was purchased during

1962 and has enabled the staff to give a type of exercise for the lower limbs not possible before. During the year the Local Authority placed a contract for rubber link mats with the Occupational Therapy unit. Although there was some difficulty in getting regular delivery of the raw materials, this has proved a very valuable occupation for some of the men.

At the end of June, two 40-seater coaches took a party of patients, two **Outing** ambulance attendants to lift heavy patients, six staff, seventeen wheel chairs and a pram to the Royal Lido at Prestatyn. The day was sunny and the patients had a very enjoyable time, despite the wind. Some of the patients had not been inside a shop for years. Many postcards were written and the local shop was nearly denuded of rock and gifts by the time the party left for home.

A very successful Christmas party was held in the unit and a programme **Christmas Party** of games was arranged so that all the patients could participate despite their disability.

A party of mentally ill patients accompanied by two of the occupational **Holiday** therapy staff spent a week at a holiday camp in Colwyn Bay, and in 1963 it is hoped to take a party of mental and physical patients to a holiday camp in Morecambe for a week. Because of the nature of their disability many of the severely handicapped have not had a holiday for many years and some of them have never had a holiday. It is hoped to include some of these cases although it is appreciated that a great deal of help in dressing, feeding and toileting will be required.

The occupational therapy section of the Mental Health Centre in Johnson Street, which is staffed by two occupational therapists, has been working to capacity during 1962. A full report of this work will be found under the heading "Occupational Therapy" in the Mental Health Section of this report. (Pages 71 and 72.)

The problem of finding suitable housing accommodation for the severely **Housing** handicapped is one which appears to be increasing each year. Liaison between this section, the Lettings Department and the Architects Department is excellent, but often the combined efforts of the three departments fail to find suitable accommodation, either to be adapted or to be altered in the planning stage. This means that some of the cases have to wait many months and sometimes years after coming to the top of the housing list before they are accommodated. This often entails great hardship for the patients concerned.



**New Unit**

During 1963 it is hoped to open a new occupational therapy unit in Leyfield Road. This will be on the same lines as the one in Kirkdale, but will provide a separate room for wood and metal work.

**Cases**

Mr. A was referred to the Unit by the Disablement Resettlement Officer. He is a deaf mute and since becoming unemployed after the closure of his place of work, he had become difficult and on occasions violent. It was arranged that he should attend the unit daily and he was assigned to the woodwork section, to assess his standard of work and work tolerance. The only way to communicate with Mr. A was by writing and it was found that if clear instructions were given to him, he produced a good finished article. After five months his name was put forward for a course at an industrial rehabilitation unit, but he failed to satisfy their assessors who said he had gross finger deformities. Although there was some spasticity in his hands it had not been found to impair his work. However, he was given a concentrated course in fine finger movements and his ability tested by using small nuts and bolts. A month later he was interviewed by the resettlement officer and staff of the Sir Robert Jones' workshops and was accepted. The latest information is that he has settled down well in the bookbinding section.

Mrs. B was visited at the request of her general practitioner. She had been knocked down by a 'bus four months previously and sustained a fractured skull and multiple fractures of the femur. When admitted to hospital she had been unconscious for a week. When first seen by the occupational therapist she had just been discharged, was feeling rather depressed, and missing the busy atmosphere of hospital life. Her leg was in plaster and she was moving very gingerly on crutches. Her general practitioner was worried about her mental state, and partly to give her something to do and partly to provide a medium whereby contact with the therapist could be obtained, basketry was started. Mrs. B was very demanding at first, but gradually she was encouraged to do more for herself and concurrently her physical condition improved. After three months work with the domiciliary occupational therapist she was walking with two sticks, her confidence was much improved and it was felt that further progress could be made by her attendance at the occupational therapy unit as well as at hospital physiotherapy. At the unit she used the treadle sewing machine and later the Oliver rehabilitation machine. Working in the kitchen and at other tasks about the department, she was

able to walk more freely and stand for gradually lengthening periods. She continues to show improvement and has recently contacted the personnel officer at her former place of work with a view to resuming employment in the not too distant future.

Mr. C, a patient suffering from schizophrenia, had been in and out of hospital for seven years. When he was discharged home he sat about and became very depressed. The mental welfare officer referred this patient to the occupational therapy unit. When the patient first attended he was withdrawn and unco-operative, taking little interest in the other patients or his surroundings, and attendance and punctuality were variable. After a month the patient was assisting in the woodwork section and occasionally joining in conversation with the other patients. This improvement continued and after a further two months the patient was working well and attending regularly. The disablement resettlement officer interviewed this man and his name was put forward for assessment at an industrial rehabilitation unit. In the meantime, he applied for various jobs and even attended for an interview, which although unsuccessful, increased his confidence and showed a measure of initiative previously lacking. A place was found for him at the industrial rehabilitation unit two months later and at the end of the course, he was reported to have done very well and was recommended for six months training in car maintenance.

Miss D, a woman of 40, who had been paralysed from the neck downwards since the age of ten, was supplied with an electrically-operated bed. This bed moves the patient from the horizontal to a sitting position simply by pressing a button, thus eliminating the need for the nurse or an aged relative to lift the patient out of bed, in order to change her position. An electrically-operated page-turner has also been supplied to this patient and she can now enjoy reading a book on her own, turning the pages by depressing a small switch with her chin. Even such a small measure of independence has a marked psychological effect on a patient so severely handicapped.

The occupational therapy section aims at a normal life for handicapped people and the accent is always on self-help and ways of overcoming difficulties. The occupational therapist does not see what she can do for the patient, but rather what the patient can do for himself, thus replacing disability with ability.



## WELFARE SERVICE

### Residential Accommodation.

Previous reports have referred to the ever-present problem of providing residential accommodation for the increasing number of persons in the upper age-groups who need care and attention. There is general agreement that elderly persons should remain in their own homes as long as possible, supported by the domiciliary services which local authorities and voluntary bodies can provide, e.g., home nursing, home help, mobile meals, regular visiting, etc. While a good deal has been done by the department in this direction the number of old people who have reached the stage when residential care is the only answer to their problem is on the increase. The waiting list at the end of 1961 was formidable, namely, 214, but by the end of 1962 there were 333 persons on the list, consisting of 98 males and 235 females, which included two married couples.

An easing of the general situation will take place in the near future as some of the plans for new building reach fruition. In July the extension to "Brookfield" was completed and the enlarged building now accommodates 33 residents as against the original 19. It was also agreed that the accommodation at New Hall, Fazakerley, which had been occupied by the "Brookfield" residents whilst alterations were taking place, should be retained until March, 1963; and this enabled some useful accommodation to be used during the winter months when the demand is greatest.

In April a start was made on the building of a new hostel in Westminster Road, and this should be ready for occupation by 56 residents in the autumn of 1963.

December saw the completion of "Melwood House" in West Derby, which will also accommodate 56 persons who were due to take up residence in early February, 1963.

In the early part of 1962 it became known that the Royal Liverpool Babies' Hospital at Woolton was to close down; and because of the extreme value of the site the City Council expressed an interest in the matter of its acquisition. The site lends itself admirably to the use of some of the existing buildings to accommodate about 40 elderly persons, to the building of a home in the grounds for about 45 elderly persons and also some individual housing for the elderly. This would be a very interesting and

useful experiment and to quote from the report to the City Council which was compiled jointly with the City Architect and Director of Housing, "it would provide very favourable facilities for the elderly of a grouped character and of a comprehensive nature, which might well be unique and of considerable value as a social experiment". By the end of the year discussions in regard to the acquisition of the site had reached an advanced stage.

It had been anticipated that further steps would be taken in the modernisation of Westminster House and in fact tenders for structural alterations in Houses 10/15 were due to be considered when the Ministry of Health drew attention to the need for progressive replacement of former Public Assistance Institutions—of which Westminster House is one—and indicated that local authorities should discontinue the use of this type of accommodation during 1962-1972.

Any further action in regard to the upgrading of Westminster House was therefore postponed and, at the time of writing the present report, consideration was being given to the best means of a run-down in consultation with the Regional Hospital Board who have responsibility for 310 hospital patients in this joint-user establishment.

The progressive closure of Westminster House will be related to the policy of the City Council in regard to the steps taken to implement the declared policy under the "ten-year plan" to provide some 112 new places each year in residential accommodation over the period 1962-1968. If 50 per cent of the new accommodation is to be allocated to Westminster House residents then by the end of March, 1968, the population in the latter building would be reduced from 620 to 310. Thereafter the final stage in the "run down" could continue until 1975 when the whole of the establishment would be vacated.

The Department was able to take over in February the premises in Birkdale which had been acquired as a holiday home. It was decided that the home should have a three-fold purpose, namely, that there should be a small nucleus of long-stay residents, that residents of the homes in Liverpool should be able to spend a holiday there and that a number of persons living in their own homes and needing care and attention should also be accommodated for short holiday periods. By the end of 1962 about 290 elderly persons had been to "Westdene", as the home is now named,



and benefited greatly by a stay there. It is hoped to add to the amenities of this establishment in the future by the provision of a fire escape (to allow the upper floor to be used for residents), a lift and an improvement in the heating and hot water supplies.

At Christmas time, gifts of money from members of the public enabled a number of needy old people to receive food parcels or supplies of coal. Once again several elderly and lonely people were invited to spend Christmas Day at convenient residential establishments and this very successful arrangement is now becoming a regular feature during the festive season.

The Merseyside Hospitals Council again made a further very substantial financial donation for amenities in homes for aged persons administered by the City Council. This generosity enabled the purchase to be made of pianos, modern television sets, radios, card tables and smokers' stands, amenities which are keenly appreciated by the residents in the department's homes.

Table 52 gives statistical information in regard to the numbers of Liverpool persons, both elderly and handicapped, who are received into establishments administered by voluntary organisations under financial arrangements made between the local authority and the body concerned.

### **Temporary Accommodation.**

Table 45 gives statistical information of the numbers of admissions and discharges during the year.

The maximum number of persons accommodated at any one time was 102 (two men, 26 women and 74 children) and the minimum was 41 (one man, eleven women and 29 children). The daily average accommodated throughout 1962 was 67 (nineteen women and 48 children). The average length of stay of all families was fifteen days, the longest stay being 38 weeks.

A monthly meeting at officer level is held to consider the circumstances surrounding the admission of all newcomers to the temporary accommodation, and also the action to be taken in regard to these families and others in respect of whom action had been previously recommended. At these meetings representatives are drawn from interested departments of the local

authority, voluntary bodies and the National Assistance Board, etc. The various recommendations are reported to the Health Committee for confirmation.

Occasionally consideration of the circumstances of a family reveals the existence of special features. In these cases it has been the practice to have a further case conference attended by the specialist field workers concerned so that a more critical examination can be held.

During the year a programme of painting and decoration of the unit was concluded and towards the end, proposals were being considered for a new fire alarm system and an improved method of heating which are to form part of general improvements at the large hospital where the temporary accommodation is situated.

### **Problem Families.**

Although some of the families admitted to the temporary accommodation unit are "problem families" and are dealt with as such, there were a number of families in this category living in their own homes who were the subject of special case conferences.

The policy of considering requests from various Corporation departments, voluntary organisations, etc., to hold case conferences to go into the question of the best means of helping problem families was inaugurated in 1957. Since that time 64 requests have been received for discussions of this kind to be held. The problems have included lack of parental control, poor budgetary control, rent arrears, risk of family break-up, etc. These case conferences continue to be of considerable value in pooling the knowledge of various field workers and suggesting possible solutions to the problems posed.

### **Domiciliary Welfare Service.**

The following is a selection from among many problems dealt with during the year by the staff of social welfare officers.

1. Early in October the department was informed of the circumstances of a large house which was let off to a number of sub-tenants, some of whom were pensioners, one being aged 91 who was living with her daughter aged 71. Difficulties had arisen due to the owner of the property failing to pay an account for electricity charges and as a result the supply of current was cut off.



In other respects the facilities provided by the accommodation were poor but it was considered that an adequate supply of electricity was most important. The circumstances aroused a good deal of local attention and intensive steps were taken to help the various sub-tenants. Eventually it became possible for the current to be turned on again but there were faults in the installation which made it necessary to disconnect the supply again. With the very helpful co-operation of the City Lighting and Electrical Department, repairs were carried out and the cost was defrayed by the members of a local church. The sub-tenants all wanted to remain in the house and the staff of the department were continually active in the matter to ensure the maximum help in the very difficult circumstances. In order to obviate a recurrence of the difficulty, one of the sub-tenants agreed to be responsible for collecting the various charges and accounting to the electricity authority.

The general position at this house was brought to the notice of the local rent tribunal. It was considered that no action could be taken over the rent payable but the tenants were recommended to seek legal advice as the landlord had failed to carry out the contract in regard to services to be provided. These various matters were being handled by a voluntary body.

2. A woman aged 54 was found in a cellar flat suffering from acute malnutrition. She had the appearance of a frail old lady, she was extremely thin and her only clothes were a cardigan and skirt. She said she knew she was very dirty and she wanted to die and hoped she could be put to sleep. She came quite voluntarily to one of the hostels. She had good furniture and it was clean, but the flat was quite unfit to live in. The furniture was stored until she was well enough to make a decision.

After seven weeks' stay in a hostel she was seen again by a welfare officer. Her physical condition had improved and she was a normal person again. It seems her husband had died suddenly eighteen months ago, it was a great shock to her and without knowing what she was doing she gave up her Corporation house, had her dog and cat put to sleep and had been living in rooms ever since. Now she has decided to sell her furniture and remain in a hostel and is very grateful for what has been done for her.

3. An elderly man came to the notice of the department when he returned home from hospital in October, 1961. He was very frail with a heart disease and unable to look after himself.

A neighbour prepared his meals and tried to keep the house clean, but the condition of the house was poor and was again affecting the health of the old man. Though he was upset by his inability to cope, it took many visits to persuade him to apply for admission to the Mariners' Home, Wallasey, as he was afraid of being turned down on health grounds. Any doubts he had about the Home were dispelled when he went there for his medical in April.

Arrangements were made for the Liverpool Corporation to contribute towards his maintenance in the Home and he eventually went there in May after being fitted out with a uniform by the Mercantile Marine Association.

4. An elderly lady of 92 who lives alone in an early type of Corporation flat was referred to the department. She is neat and clean, amazingly alert mentally for her age and likes to attend her Old Folks' Club on fine afternoons.

A home help is supplied and up to recently she enjoyed the mobile meals. She subsequently gave up the meals "because she is a very small eater" and feels able to cope with light meals for herself. The Home Help service, however, is her great standby each week, and she is delighted that her flat is so nicely tended for her.

She likes to chat for some ten minutes when the social welfare officer calls on her. She would not wish to be rehoused in a modern flat and enjoys living where she does, in the district where she has lived for most of her life.

5. An elderly woman was moved from appalling conditions above a shop to a new Corporation flat. Mobile Meals and Home Help service were provided. Through her lack of co-operation the home help was withdrawn and she herself cancelled the meals service. She lost all interest in herself and became so neglected that proceedings were started for her removal under Section 47 of the National Assistance Act. However, she was persuaded by an Assistant Medical Officer to go into Westminster House. She improved wonderfully while she was there and looked years younger. Unfortunately, she discharged herself after five months and returned to her flat. Once more she deteriorated and one day was found in a collapsed condition, removed to hospital and died there some weeks later.



6. On the request of a Consultant Physician the Welfare Department was asked to report on the past social history of Mr. X, aged 50 years, who had suffered a hemiplegia which has resulted in aphasia, thus making any interview with this man difficult as he was inclined to become violent at times. Mr. X lives in a basement flat, one room with no sanitation except outside in the yard. No papers were available to trace any relatives or friends, or any correspondence relating to his past history. With the help of the National Assistance Board, Probation Officer and the Ministry of Labour, Mr. X's background was traced.

He had lived with his parents but after their death was evicted for non-payment of rent, moved into unfurnished rooms, was unable to stay and went on the roads for over two years. Charged by the police with vagrancy he was placed on probation, was found accommodation and after this became ill.

He has refused all offers of help so far, but he is not so anti-social as on the first visit. This man is responding to visits and is now accepting help.

7. The following case is typical of many which were met with during the wintry conditions of early 1962 and repeated in greater degree during the following winter.

An urgent request was received one evening from a doctor that accommodation might be found for one of his patients, an elderly man of 80. He was a chronic bronchitic and his condition was fast becoming critical as the result of severe flooding in the house because of burst water pipes. The old man was obviously very frail and affected by the extreme weather conditions. Within a very short time he was comfortably installed in residential accommodation.

8. An elderly couple, aged 89 and 90 had been married for 69 years. All the time their son and daughter were able to supervise them they managed very well. Unfortunately, both died during the last year. The shock of this affected the wife's mental state, which up to then had been good. The Home Help service then helped once a week. Mobile meals were refused by the husband who did all the cooking, etc., but he was grateful for the domestic assistance.

All went well until October when the wife had a fall, injured her back and was admitted to hospital. The husband's health has greatly

deteriorated since his wife has been away, but he is terrified of her being sent home because he knows he could not possibly manage to look after her as he has done in the past. The husband will not consider hostel accommodation as he wants to keep his home as long as he can. He visits his wife twice weekly, and is quite happy to know that she is being well cared for.

### **Removal to Suitable Premises of Persons in need of Care and Attention.**

During the year it was necessary to remove compulsorily from their own homes a number of persons under the provisions of the National Assistance Act, 1948. Statistically it is shown that the removal of ten of these persons was due to the fact that they were suffering from grave chronic disease, and five because they were aged, infirm and living in insanitary conditions; and all of them were not receiving proper care and attention. There were other cases of a similar nature which came to the notice of the department where the powers contained in the Acts could have been invoked but the persons concerned agreed to enter hospital or residential accommodation before the machinery was put into operation. An interesting case in the latter category was that of (P. U.) a young overseas student who had been occasionally in mental hospitals.

In a city where there are approximately 78,000 persons over 65 years of age it is clear that a number of these will be living alone and for various reasons have no relatives either living or readily accessible. Of this latter group it is not surprising if at least a very small number deteriorate in health and personal habits to the stage where it is in their own interests as well as the health of other persons that they should be removed to care, either hospital or residential accommodation.

Of the fifteen persons who were removed, twelve were females and three were males. They illustrated the state of affairs which can arise when elderly persons are living alone or are dependent on help from friends or neighbours. Nine were removed to hospital and six to residential accommodation. So grave was the condition of three patients that they died within three days and a fourth died at the end of a fortnight. In a few cases hospital treatment was so effective that the patients were able to be discharged and were found on revisiting to have improved in health; some died in spite of long treatment and others were still in care at the end of the year.



### Mobile Meals.

During the year a good deal of thought was given to the possibility of providing vehicles for the transport of handicapped persons; and the opportunity was also taken of considering the utilisation of these vehicles during the middle of the day for conveying mobile meals. If the necessary approvals were forthcoming it would allow for a considerable increase in the number of meals at present provided and what is more important, bring into the scheme the areas of the city not yet covered. At the time of writing this report the proposals were still being considered by the various committees concerned.

At the end of 1962 the scheme for delivering mobile meals was based on four residential establishments, namely, Westminster House, New Grafton House, Holt House and Aigburth House. It was hoped that during 1963, meals would be delivered from the newly-built home at "Melwood House", West Derby.

At the end of the year about 1,357 meals were being delivered weekly to a total of 500 recipients. The very valuable help afforded by the Women's Voluntary Service, whose members act as servers of the meals, is keenly appreciated.

### Rest Centres for Elderly Persons.

Reference was made in the report for the previous year to the establishment of a rest centre and club for old people in the Woolton area by the Liverpool Old People's Welfare Council. The City Council agreed to provide the site works, a start on which was made in the Spring, and at the time of writing the present report, the scheme, which includes provision of a pre-fabricated building, is almost complete.

The three existing centres, which are run in co-operation with the Women's Voluntary Service, at Paradise Street, River View at the Pier Head, overlooking the River Mersey and landing stage, and Sheil Park continue to be regularly and well patronised.

### Registration of Disabled Persons' and Old Persons' Homes.

Twenty-six homes are registered with the authority, sixteen administered by voluntary bodies and ten by private individuals. These homes are subject to inspection by officers of the department to ensure that satisfactory standards are maintained.

Paradise  
Street,  
River View,  
Sheil Park,  
Woolton

Welfare of Handicapped Persons.

The following table gives statistical information in respect of the last three years in regard to the results of the examination by ophthalmic surgeons of persons who were referred because their vision was so defective that they might be regarded as blind or partially sighted :—

Blind Welfare Statistics

Year	Number Examined	Registered as Blind	Registered as Partially Sighted	Not Blind
1960	234	148	67	19
1961	228	163	53	12
1962	204	138	60	6

Statistical tables in regard to registered blind and partially sighted persons are contained in the appendix.

Blind Employment.

In January a fire occurred in the brush department of the Cornwallis Street Workshops and as a result the department had to close, while the damage was being repaired, until the middle of March. A small number of Liverpool blind persons were involved, and payments made to them by the workshop management together with augmentation from the local authority ensured that during the period of enforced idleness each worker received what amounted to his average weekly wage. The Ministry of Labour, in the exceptional circumstances, very kindly agreed to continue their grant to the local authority beyond the normal period up to the date when the workers were able to resume employment.

Blind Employment

The following are details in respect of the numbers of blind persons who were engaged at the 31st December, 1962, in various trades operated in the two workshops for the blind in Liverpool :—

Workshops for the Blind, Cornwallis Street :—				
*Basket making	...	...	...	11
Brush making	...	...	...	19
Mat making	...	...	...	29
Upholstery	...	...	...	6
				— 65



## Catholic Blind Institute, Brunswick Road :—

Basket making	...	...	...	1	
Mat making	...	...	...	4	
Machine knitting	...	...	...	5	
				—	10
					—
				TOTAL ...	75

\*Includes one employee, partially sighted.

The following numbers of blind persons were engaged in sighted industry :—

Basket Maker	...	...	...	...	...	...	1
Domestic workers	...	...	...	...	...	...	5
Fitters or Assemblers	...	...	...	...	...	...	16
Groundsman	...	...	...	...	...	...	1
Labourers	...	...	...	...	...	...	2
Lecturers, etc.	...	...	...	...	...	...	2
Machine Tool Operators	...	...	...	...	...	...	32
Masseurs, etc.	...	...	...	...	...	...	2
Musicians	...	...	...	...	...	...	2
Packers, etc.	...	...	...	...	...	...	11
Piano Tuners	...	...	...	...	...	...	2
Poultry Keeper	...	...	...	...	...	...	1
Process workers	...	...	...	...	...	...	2
Sales Representatives	...	...	...	...	...	...	3
Shop Assistant	...	...	...	...	...	...	1
Shopkeepers, etc.	...	...	...	...	...	...	5
Social Welfare Officers, etc....	...	...	...	...	...	...	5
Solicitors, etc.	...	...	...	...	...	...	2
Storekeeper	...	...	...	...	...	...	1
Telephone Operators	...	...	...	...	...	...	8
Testers, Inspectors, etc.	...	...	...	...	...	...	3
Typists, etc.	...	...	...	...	...	...	6
Upholsterer	...	...	...	...	...	...	1
							—
							—
							TOTAL ...
							... 114
							—

This is an increase of three compared with the previous year.

The following persons were employed in the scheme for home workers and their earnings supplemented by the City Council :—

Chair Seater	...	...	...	...	...	...	1
Hawker	...	...	...	...	...	...	1
Machine Knitter	...	...	...	...	...	...	1
Musicians, etc.	...	...	...	...	...	...	4
Shopkeeper	...	...	...	...	...	...	1
							—
							8
							—

### **Sir Robert Jones Workshops.**

Effect was given during the year to the decision of the City Council that these workshops should act for the local authority on an agency basis in the same way as the two workshops for the blind. The result has been that instead of a payment towards expenses of wages, office salaries and also of a special grant, a variable annual payment per worker is to be made. On the other side of the account the local authority will receive from the Ministry of Labour a grant which would normally have been paid direct to the workshops.

Sixty-eight severely handicapped persons are employed at the workshops, mainly in the trade of bookbinding, with a small number in the printing department or dealing with the renovation of Christmas cards.

### **Deaf and Dumb Welfare.**

Financial aid is given by the City Council to two voluntary bodies, namely, the Liverpool Adult Deaf and Dumb Benevolent Society and the Catholic Deaf and Dumb Society of St. Vincent de Paul which provide a comprehensive welfare service on behalf of the City Council to about 570 registered Liverpool residents. There is a consultative committee consisting of representatives of the Merseyside local authorities and the voluntary bodies.

### **Epileptics.**

There are 90 epileptics receiving residential care at the cost of the local authority. They are in three establishments administered by voluntary organisations and one administered by another local authority.

### **Parking of Vehicles.**

Under the scheme outlined in Ministry of Health Circular 17/61, 143 badges have been issued to drivers to display on their invalid vehicles with the object of helping the police to assist the drivers in parking and to exercise discretion in their favour when possible.

The following organisations still make good use of the premises at 100, **100 Walton Village** for social and recreational purposes:—

Inskip League of Friendship.

Invalid Tricycle Association.

Liverpool Hard of Hearing Club.

Liverpool Spastic Fellowship (Day Centre).



Due to staffing difficulties it was not possible for a time to operate the four centres for handicapped persons which have been established at Garston, Mill Street, Knotty Ash and Walton Village. Replacement staff were recruited who commenced duty in the autumn and the centres were re-opened. Fortunately it had still been possible to organise a very successful day outing at Southport which was well attended by the centre members. At Christmas time it was also possible to repeat the annual party in the premises of the Liverpool Adult Deaf and Dumb Benevolent Society which were kindly lent for the purpose.

### **Protection of the property of persons admitted to hospital or residential accommodation and Estates of Deceased Persons.**

A total of 1,792 visits and revisits were made in connection with the property of persons admitted to hospital or residential accommodation and also in connection with the affairs of deceased persons whose funerals were undertaken by the department. A sum of £2,172 was recovered from various sources and placed for safe keeping with the City Treasury. Of the cases dealt with, 54 were referred by the police, including 38 persons found dead at home or elsewhere, and sixteen who had been taken ill and removed to hospital.

## HOUSING POINTS SCHEME

During 1962 a total of 4,192 general medical cases, 382 pulmonary tuberculosis and 22 non-pulmonary tuberculosis cases, applied for assistance in rehousing, this showing a decrease of 96 (2·3 per cent) in the number of general medical cases, a decrease of 102 (21·1 per cent) in the cases of pulmonary tuberculosis and no change in the non-pulmonary tuberculosis figures for 1961. Statistics  
General

658 general medical cases were awarded points; 98 of these were recommended to the City Architect and Director of Housing for special priority rehousing, 60 of these cases being accommodated by the end of the year. Medical

1,910 general medical cases applied for transfer during the year. Of these 719 (37·5 per cent) were recommended to the City Architect and Director of Housing. 116 tuberculosis cases were also recommended for transfers.

A further 194 applications were received in respect of non-medical cases and reports concerning 473 grossly overcrowded families were forwarded to the City Architect and Director of Housing. Overcrowding

The allocation of points is designed to enable the Medical Officer of Health to give assistance in those cases which, for reasons of health, should receive some degree of priority in rehousing. There are two forms which this assistance may take:—

1. Additional points may be awarded and added to the applicant's basic points. For general medical cases a maximum of two points can be given and for tuberculosis cases up to five points. In many cases this brings the applicant into the allocation group and he is assured of rehousing.

2. By arrangements between the City Architect and Director of Housing and the Medical Officer of Health, 180 new lettings are made available each year for urgent priority rehousing on health grounds. 120 of these are allocated for the rehousing of families in which tuberculosis has been diagnosed; further details relating to these lettings will be found in the section upon tuberculosis. The remaining 60 premises are available, at the discretion of the Medical Officer of Health, for the urgent priority rehousing of families in which there are medical conditions other than tuberculosis.



In all cases recommended for urgent priority, the City Architect and Director of Housing notifies the Medical Officer of Health whenever an offer of accommodation is made to the patient. This is followed later by a notification of acceptance or refusal on behalf of the patient. If the offer has been declined, the City Architect and Director of Housing is notified whether or not the refusal is justified on medical grounds. If this is so, then an offer of more suitable accommodation is made as soon as possible.

**Six Representative Typical Cases**

As examples of the type of case assisted during 1962, particulars are given of the following six cases:—

**General Medical**

(1) A mother and her three young children witnessed the tragic death of her husband when he fell through the skylight window, which he was repairing, and was killed immediately. This lady and her children then split up and went to live with various relatives as they had developed extreme anxiety states and could no longer live in the flat where the accident occurred.

(2) A young child, suffering from chronic nephritis, was unable to receive adequate care and attention owing to the lack of facilities in the old house in which the family lived.

(3) A man who had both legs amputated at the level of mid thigh, following a serious railway accident, was recommended for immediate rehousing to ground level accommodation.

(4) Two elderly ladies were the sole occupants of an old house. One lady had a serious heart condition and in addition, had very defective vision as a result of a cataract. The other lady had severe arthritis and was a registered disabled person. The property was inspected by a member of the Health Department staff who reported that the stairs were both steep and dangerous and that it would be impossible to fit handrails securely. As both these ladies were experiencing great difficulty with the stairs and had, in fact, already fallen down them, they were recommended for special priority rehousing to ground level accommodation.

**Tuberculosis**

(1) A lady, suffering from pulmonary tuberculosis, was living with her husband and three children as sub-tenants in a corporation flat. They had the use of one room for all purposes, the other two rooms being occupied by the tenant (who was also a tuberculosis patient) and her two sons.

(2) A man and wife with two daughters had the use of one bedroom in the home of the man's mother. This man had pulmonary tuberculosis and his wife had undergone an internal operation. Owing to domestic friction the tenant obtained a court order for possession of the property and they received notice to quit. The family had nowhere to go and were, therefore, recommended for special priority rehousing.

In all the general cases a medical certificate (Form H.1) submitted by medical practitioners serves as the starting point of the enquiry. Most tuberculosis cases are also initiated by Form H.1, the remainder being first brought up by the tuberculosis visitor. All cases are investigated in the first instance by a public health inspector who completes a report on the housing conditions. This report includes such details as the size of the family, type of house, and number of rooms occupied, extent of overcrowding, condition of house and state of cleanliness, w.c. accommodation, etc. This visit may be supplemented by a report from a public health inspector, health visitor or medical officer.

In tuberculosis cases a report is also submitted by the tuberculosis visitor, giving such details as the type and extent of the disease, state of infectivity, family history of tuberculosis, etc. Extra housing points may be awarded as already indicated, while those cases which appear to be sufficiently urgent are visited personally by the Principal Medical Officer (Epidemiology) or Assistant Medical Officer (Tuberculosis) who may recommend their inclusion in the special tuberculosis priority scheme. Special care is taken to ensure that the Housing Department is notified of any additional points granted for medical conditions.

Where an applicant is a sub-tenant in one of the new Liverpool housing estates outside the City boundary and is on the City housing register, contact is made with the local authority concerned and a housing report and medical certificate obtained. The case is then assessed in the usual manner.

**Residents  
outside City  
Boundary**

For housing applicants who already live in Corporation property and for medical reasons request a transfer, a close liaison exists with the Housing Department. A letter of recommendation from the Medical Officer is usually sufficient to obtain the necessary transfer.

When an applicant, who has been recommended for special priority rehousing under the tuberculosis priority scheme, refuses the offer of accommodation made to him, his reasons for declining the tenancy are carefully

**Refusals**



considered together with the medical aspects of his case, and if it is finally decided that there were, in fact, valid medical grounds for the refusal, then the City Architect and Director of Housing is informed accordingly of the most suitable type of accommodation necessary and the refusal is not held against the applicant. Eight such cases were rehoused in 1962. At the end of the year there were 37 other applicants who had refused offers of accommodation.

## MEDICAL EXAMINATIONS

During 1962, 3,120 medical examinations of Corporation employees were carried out by assistant medical officers in the Health Department. This is a total increase of 6.8 per cent over the 1961 figure of 2,924. The final assessment of each case was made by the Principal Medical Officer (Epidemiology).

These examinations consisted of three classes:—

1. For entry into the Corporation Service for officers.
2. For entry into the superannuation scheme for manual workers.
3. By reason of extended sickness.

Fifty-three candidates were examined on behalf of other local authorities.

Of the examinations undertaken for the Corporation, 929 were for new appointments, 1,323 for admission to the superannuation scheme, and 484 for extended sickness. Included in the above figure is a total of 21 Mersey Tunnel workers who are given periodical examinations because of the nature of their work. Ninety-seven reports were obtained from doctors in hospitals and general practice.

It was decided, after medical examination, and consultation with the patient's general practitioner, that 145 were permanently unfit for work and should be retired; 44 manual workers were unfit for entry into the superannuation scheme, and four officers were medically unfit for new appointments. A total of 193 persons, making 6.2 per cent of those examined were found to be unfit, a decrease of 15.7 per cent compared with the number declared unfit during 1961. A list of the medical conditions causing unfitness appears in the following table:—

### CAUSES OF UNFITNESS

DISEASES OF CARDIOVASCULAR SYSTEM				DISEASES OF NERVOUS SYSTEM			
Hypertension	...	...	48	Tabes Dorsalis	...	...	1
Coronary Disease	...	...	13	Epilepsy	...	...	4
Mitral Stenosis	...	...	4	Neuritis	...	...	4
Myocardial Degeneration	...	...	6	Vertigo	...	...	1
Auricular Fibrillation	...	...	3	Parkinsons Disease	...	...	2
Cardiac Enlargement	...	...	1				—
			—				12
			75				—
			—				



RESPIRATORY DISEASES					PSYCHIATRIC CONDITIONS				
Chronic Bronchitis and					Hallucinations (Confusion)				
Emphysema	...	...	...	52	Anxiety State	...	...	...	4
Bronchiectasis	...	...	...	1	Schizophrenia	...	...	...	1
Tuberculosis	...	...	...	5					6
				58					
ORTHOPAEDIC CONDITIONS					CANCER				
Osteoarthritis	...	...	...	9	Carcinoma (all kinds)				
Rheumatism	...	...	...	5					11
Rheumatoid Arthritis	...	...	...	2	In eight cases more than one defect was the cause of retirement.				
Muscular Dystrophy	...	...	...	1	SUMMARY				
Sciatica	...	...	...	2	ENTRY				
Injury to Back	...	...	...	1	Male	...	...	...	36
Injury to Os Calcis (Rt.)	...	...	...	1	Female	...	...	...	6
Metatarsalgia	...	...	...	1					42
Ankylosing Spondylitis	...	...	...	1					
Ununited Fracture	...	...	...	1					
				24	RETIREMENT				
OTHER CONDITIONS					Male	...	...	...	99
Anaemia	...	...	...	1	Female	...	...	...	52
Diabetes	...	...	...	2					151
Nephritis	...	...	...	1					
Inguinal Hernia	...	...	...	2					
Epididymo-Orchitis	...	...	...	1					
Degenerative Eye Changes	...	...	...	2					
Blindness	...	...	...	1					
Peptic Ulcer	...	...	...	4					
Skin Disease	...	...	...	2					
				16					

Improvements  
in Techniques  
of  
Examination

During the latter part of the year new methods of examination were introduced. An electrocardiogram, a forced expiratory volume spirometer and an electrically operated blood pressure recorder were installed. Arrangements were also made for biochemical investigations of blood and urine specimens to be carried out.

Three assistant medical officers attended Sefton General Hospital Cardiology Unit where they received special instruction in the use of these new methods.

This represents a considerable improvement in the methods of diagnosis enabling more accuracy to be achieved and more reliable advice to be given.

The help and advice given by Dr. McKendrick and Dr. Coulshed of the Regional Cardiac Centre have proved invaluable in carrying out these improvements and is much appreciated.

## ENVIRONMENTAL HEALTH CONTROL

There is still a considerable amount of work to be carried out in connection with slum clearance, houses let in multiple occupation and smoke control, before environmental conditions can be satisfactory for all members of the community. **Environmental Health**

A certain amount of difficulty is arising in recruitment of qualified inspectors to fill the vacancies due to retirements and resignations. The training scheme is the only source and during 1962, eleven student inspectors obtained the Certificate of the Public Health Inspectors Education Board, qualifying for appointment as public health inspectors and seven qualified inspectors obtained the Meat and Other Foods Certificate of the Royal Society of Health. There was no increase in the total number of qualified inspectors on the staff as the number of students who qualified was the same as the number of retirements and resignations. **Recruitment of Staff**

A total of 39,075 requests were received for inspectors to visit premises which necessitated a total of 74,263 visits to remedy the complaints. Altogether a total of 314,159 visits and inspections were carried out under various enactments and 19,111 notices were issued under the Acts and Byelaws. **Summary of Inspections**

During the year 112 prosecutions were taken and the penalties and costs which were imposed amounted to £299. **Legal Proceedings**

(See Table No. 60, Statistical Appendix.)

It was necessary to carry out work in default of owners to 192 houses involving an expenditure of approximately £2,500, which is recoverable under the appropriate enactment. **Work in Default**

The Liverpool Corporation Act, 1955, empowers the Corporation to clear drains after giving 48 hours' notice. 1,257 notices in respect of choked drains were issued and it was necessary for the Corporation to clear 101 drains in default of the owners. The cost will be recovered in accordance with the Act. **Choked Drains**

Defective drains cause rodent infestation, flooding and subsidence. There were 1,398 drainage systems tested to remove these problems and notices were issued in respect of 816 drainage systems which were found to be defective. In addition 39 choked or defective public sewers were referred **Drain Testing**



to the City Engineer's Department for action under the provisions of Section 24 of the Public Health Act, 1936. The cost incurred will be subsequently recovered from the owners of the property involved.

**Special  
Sub-  
Committee**

The weekly meeting of the Special Sub-Committee has enabled immediate action to be taken to clear choked drains and remedy other urgent defects. This procedure constantly reduces the period of time during which tenants could suffer discomfort.

**Depart-  
mental  
References**

Other departments have co-operated by forwarding 9,324 references in respect of matters requiring the attention of inspectors and 4,461 references were forwarded to other departments.

**Infectious  
Disease**

Inspectors visit houses to make enquiries following notification of certain infectious diseases and the table indicates the number of investigations:—

Number of visits to premises relating to			
cases of infectious disease	...	...	1,457

Number of enquiries regarding contacts of			
infectious disease	...	...	396

**Food  
Poisoning**

Investigations have continued in connection with ingestion disease enquiries when the inspectors have obtained information about contacts and modes of infection. 4,883 specimens from 3,214 persons were submitted for bacteriological examination and 1,952 specimens from 620 persons proved positive.

**Common  
Lodging-  
houses**

There are thirteen registered common lodging-houses in the city, twelve provide accommodation for 930 males and one provides accommodation for 94 females. During 1962, two lodging-houses were licensed for a conditional period of six months. Upon application for a further period of registration in one case, the registration was granted for a period of seven months; however, in the second case, having regard to the low standard of cleanliness and the general unsatisfactory conditions existing, these premises were registered for three months and after improvements had been made for a further four-month period. As a result of the constant supervision maintained by the inspectors these premises continue to maintain an improved standard of cleanliness and during the latter months of the year

all the registered lodging-houses were satisfactory. The public health inspectors made 345 visits, both day and night, resulting in 33 notices being issued in respect of byelaw infringements and on 34 occasions it was necessary to give the keepers a verbal warning. A total of 12,861 beds were examined and 413 beds and articles were found to be verminous, these being cleansed by the local authority, under the supervision of the public health inspectors.

There is a total of nine seamen's lodging-houses in the city, five are **Seamen's Lodging-houses** unlicensed and four are licensed, under byelaws. These houses provide satisfactory accommodation for British seamen and many other nationalities, including Chinese, Arab, Somali and Indian. The total accommodation available is 807 beds and public health inspectors made 124 day and night inspections. Infringements of the byelaws were reported on 22 occasions and the necessary action was taken to comply with the requirements of the legislation. A total of 6,244 beds were examined during the inspectors' visits to the premises and only nineteen beds were found to be unsatisfactory. In each case the beds were cleansed under the supervision of the public health inspectors.

Under the terms of licences issued from the Home Office, inspectors **Removal of Remains** supervised the exhumation of 20 bodies during the year and the remains of six persons were shipped abroad.

Inspections of trial holes were made on 23 filled-in sites to ascertain **Filled-up Ground** whether the ground was free from faecal or offensive animal or vegetable matter, and that the sites were suitable for building purposes.

The provision of sewerage facilities is reasonably adequate. The present **Sewerage** provision at the two main sewage disposal works is not adequate, but a new **Sewage Disposal** sewage disposal works in one case is under construction and will come into operation in 1963, and in the other case an extension scheme, approved by the Ministry of Housing and Local Government has commenced.

The Docks and Inland Waterways Executive, North Western Division, **Canal Boats** are the proprietors of the Leeds and Liverpool Canal, the only canal having direct communication with Liverpool. The length of the waterway within the city (exclusive of the locks communicating with the dock estate) is approximately three miles.



Liverpool is one of several registration authorities for boats used as dwellings plying on the canal. The details of the boats registered by the authority are indicated in Table 'A' and 'B'.

TABLE A

Number of Boats	Boats on the register 1st January, 1962 ...				141
	New boats registered ... ..				Nil.
	Boats removed from the register ...				73
	Boats on register 31st December, 1962 ...				68

73 boats ceased to be used as dwellings during the year and were removed from the register.

TABLE B

Type of Boat	Number and type of boats registered :—				
	Motor propelled boats	...	...	...	30
	Steam propelled boats	...	...	...	13
	Motor towed boats	...	...	...	16
	Steam towed boats	...	...	...	9
	Horse drawn	...	...	...	Nil.
					<hr/> 68 <hr/>

No. of Boats Inspected 99 inspections of canal boats were made during the year and the places of registration of the boats were as follows:—

TABLE C

Number of boats visited	...	...	...	99
Registered at Liverpool	...	...	...	60
Registered at Runcorn	...	...	...	1
Registered at Manchester	...	...	...	1
Registered at Leeds ...	...	...	...	1
Registered at Northwich	...	...	...	Nil.
Boats not registered and not used as dwellings	...	...	...	36

All boats were "wide" boats, 42 being motor propelled, twelve steam propelled, 29 motor towed and sixteen steam towed. Six contraventions of the Act and Regulations were found on five boats, four of which were registered at Liverpool and one at Leeds, the contraventions being shown in the following table:—

TABLE D

Nature of Contravention	Reported	Remedied	Contraven- tions
No. of Certificates not on board ... ..	2	2	
Defective stove or stove pipes ... ..	2	2	
Registration, lettering and numbering not legible or incorrect ... ..	1	1	
Suitable container for drinking water not provided ... ..	1	1	
	6	6	

Two written notices with respect to the contraventions were sent to the owners concerned and all have been complied with. No information was laid during the year against either owners or masters for infringements of the Act or Regulations.

The inspectors of the Port Health Authority made 65 inspections of canal boats in the docks during the year, two contraventions were found, both of which were subsequently dealt with. The figures are included in Table 'D'. **Inspections by Port Health Authority**

No case of infectious sickness was reported as having occurred during the year on any canal boat visiting the district. **Infectious Diseases**

The number and sex of persons found in occupation of the 63 canal boats used as dwellings are included in the following table:— **Population on Canal Boats**

TABLE E

Population of canal boats: Men ... ..	126
Women ... ..	Nil.
Children ... ..	Nil.
	126
Distributed as under	
Males over 14 years ... ..	126



**Industrial  
Nuisances,  
Effluvia—  
Effect of  
weather**

During the year the number of complaints of obnoxious smells from industrial activities have fallen. It is possible that there has been some improvement so far as the emission of odorous substances is concerned, but it is thought that one cause may have been the long periods of strong persistent wind which prevailed during the summer months which would have had the effect of diluting any odorous gases to such a degree as to render them more or less innocuous.

**Offensive  
Trades**

The problem of seeing that the animal by-products plants in the abattoir operate without giving rise to complaints of obnoxious smells is one which engages the attention of the department constantly, as the cause is usually due to carelessness or errors of employees working in this type of plant. As the source of an emission may be the opening of a cover at the wrong time, or neglect to open a particular valve at the right time, in any one of a dozen plants, it is extremely difficult to pin-point an offender. Nevertheless, the frequent visits of inspectors to the offensive trades has had the effect of reminding the operators that care must be taken if complaints are to be avoided and it is a fact that these have not been so persistent during the year.

**Dust**

Complaints of dust nuisance have been relatively few during the year. Matters investigated, included excessive dust during the tipping of lime and sand in a builder's yard, and the unloading of material in the factory of a firm making pre-cast concrete units. In one case an urgent request was made by a bottling firm to stop warehousemen unloading sacks of rice flour in such a manner that the dust was drifting into the bottling plant. This was prevented by having the sacks placed in canvas slings before being hoisted into the warehouse.

**Noise**

The number of complaints to the department about excessive noise was reduced during the year, notwithstanding the publicity that has been given to this annoying aspect of modern living. Whether this indicates that industry in particular is paying more attention to the prevention of this nuisance is difficult to assess. It has been found that some firms have been approached directly by persons affected and have taken satisfactory ameliorative or preventative action immediately to abate the cause. As the actual loudness of a noise is not always a measure of whether it will annoy and irritate certain people, the department is dependent on the complaints of affected persons as to the existence of a noise problem before proceeding with the investigation.

Not all complaints are concerned with noisy industrial activities as enquiries were made in respect of excessively loud television sets in private houses, noisy teenagers on the staircases of Corporation flats, barking dogs and the slamming of garage doors. Other matters investigated included noise caused by the starting up of motor vehicles early in the morning, the vibration of a printing machine in the evening and on Sundays and the sound of a high-velocity fan operating day and night for refrigeration purposes. These noises occasioned no comment during the day time, but as other background sound diminished, the sources became noticeable and gave rise to complaint. Appropriate steps were taken in all cases without recourse to summary action, which was unnecessary in view of the willing co-operation of the offenders.



## HOUSING AND SLUM CLEARANCE

### Housing and Slum Clearance

The Housing Survey Report of 1955 revealed the magnitude of the slum clearance problem which had to be tackled in Liverpool. The report indicated that there were over 88,000 houses which did not conform to the standard of fitness and almost 27,000 of these were scheduled for demolition. At the time the report was submitted, 4,827 had already been represented and since then a further 8,800 dwellings have been represented making a total of 13,627.

Although many thousands of houses have been the subject of extensive works of repair under the provisions of the Rent Act, 1957, in addition to slum clearance, the rate of deterioration in many others is considerable and a large number of houses previously classified as fit must now be added to the original 88,000 which did not conform to the standard of fitness. There is, therefore, a tremendous task ahead and still many problems remain to be overcome, and although the momentum is being accelerated additional land for housing development must be acquired in order that the impetus may be maintained.

### Slum Clear- ance Progress

Of the 1,334 dwellings which were surveyed during the year as to their suitability for representation as unfit for human habitation, a total of 1,257 were represented under the provisions of the Housing Act, 1957, of which 1,047 houses were located in seven clearance areas.

### Compulsory Purchase Orders

Of the 3,007 houses included in unconfirmed clearance areas, 786 dwellings in eight clearance areas were made the subject of compulsory purchase orders, and a further 400 houses included in seven compulsory purchase orders were submitted to the Minister of Housing and Local Government for confirmation.

### Public Inquiries

There were three Public Inquiries held during the year in respect of three Compulsory Purchase Orders and two Orders were unopposed. The total number of dwellings included in these five orders was 260.

### Orders Confirmed

A total of 208 houses included in five Compulsory Orders were confirmed during the year.

### Rehousing

There has been an increased allocation in the rehousing of families from condemned properties and 1,461 families have been rehoused during the year from dwellings included in confirmed Compulsory Purchase Orders.

The period of time from the commencement of Clearance Area procedure to rehousing and demolition is still extremely protracted and presents difficulties, during the interim period, in the maintenance of the structure.

The closing and demolition of individual houses under the provisions of Part II of the Housing Act, 1957, is particularly helpful in dealing with those dwellings situated upon land which is not zoned for housing, although increasing use of these powers is now being made in advance of Clearance Area procedure to deal with those dwellings which are seriously dilapidated and often potentially dangerous.

160 dwellings occupied by 272 families were represented to the Demolition and Closing Orders (Special) Sub-Committee as unfit for human habitation.

During the year the Committee considered the condition of 153 houses represented in 1962 and also those which remained from the previous year. Of these the Committee resolved that Demolition Orders be made in respect of 34 houses and Closing Orders be made on 114; two were deferred pending reports on offers of works to be submitted by the owner and undertakings not to re-let were accepted on the remainder.

Following upon the rehousing of the occupants from premises subject to operative orders 81 houses were demolished and 82 closed.

The representation of rooms and parts of premises occupied as separate dwellings which are unfit for human habitation is carried out under the provisions of Section 18 of the Housing Act, 1957, and during the year 50 such dwellings were represented. After due consideration the Committee resolved to make 48 Closing Orders on parts of premises and at the close of the year twelve representations had still to be considered. 62 families were rehoused from lettings subject to operative orders made under Section 18 of the Housing Act, 1957.

The housing survey register completed in 1955 following upon the housing survey is now an indispensable guide in dealing with the large number of enquiries being made by both the general public and other interested parties concerned with the sale of dwellinghouses.

Since the Rent Act, 1957, became operative on the 6th July, 1957, a total of 30,423 visits have been made to dwellinghouses by public health inspectors in connection with 8,263 applications for certificates of disrepair;

**Individual  
Unfit Houses—  
Part II of the  
Housing Act  
1957**

**Demolition  
and Closing  
Orders made  
during the  
year**

**Demolition  
and Closing  
of Individual  
Houses**

**Rooms and  
parts of  
premises used  
as separate  
dwellings**

**Orders made**

**Property  
Enquiries**

**Rent Act  
1957**



1,185 applications for cancellation of certificates of disrepair; 3,184 applications from tenants for certificates for non-remedying of defects specified in the undertakings given by landlords and 2,267 applications from owners for certificates as to the remedying of defects specified in the undertakings given to the tenants.

**Statistical  
Details  
1962**

Total number of applications for Certificates of Disrepair	272
Applications withdrawn ... ..	51
Number of Notices served on landlords of the Local Authority's intention to issue Certificates of Disrepair (Form J) ... ..	221
Number of Undertakings to carry out repairs received from landlords (Form K) ... ..	144
Number of Certificates of Disrepair issued to tenants (Form L) ... ..	71
Number of landlords who completed the repairs within the statutory period following the service of Form J	6
Number of applications (Form O) from tenants who have applied after owners have failed to comply with undertakings given (Form H or K) ... ..	47
Number of Certificates (Form P) issued to tenants	40
Number of applications (Form O) from owners who have completed their undertakings ... ..	120
Number of Certificates (Form P) issued to owners	118
Number of applications (Form O) not finalised during the year ... ..	9
Number of applications (Form M) received from owners for a cancellation certificate ... ..	76
Number of objections to cancellation received from tenants ... ..	33
Number of cancellation certificates issued ... ..	67

**Cancellation  
of Certificates  
of Disrepair**

If the landlord is not satisfied with the requirements of the local authority he may apply to the County Court for all or any of the defects to be cancelled on the ground that they should not have been included. The tenant also has a right of appeal to the same Court if he is not satisfied with the decision of the local authority regarding the cancellation of the certificate.

**Certificate of  
Disrepair**

**Landlord's  
failure to  
comply with  
undertakings**

Following the issue of the certificate of disrepair the tenants may reduce their rent in accordance with the Act until such time as the defects have been satisfactorily completed. Similarly, where the owner undertakes to complete the necessary repairs within a period of six months and fails to do so, tenants are permitted to reduce their rent as if a certificate of disrepair had been issued, until such time as the defects are remedied.

Owners and tenants have a right of appeal against the local authority's **Right of Appeal** decisions. However, since the Act became operative, this procedure has not been necessary, owners and tenants being satisfied that their applications had been carefully considered. In a number of cases, after a refusal to cancel has been given, the owners carried out further repairs to the satisfaction of both the tenants and the Health Department.

The year has shown a decrease in the number of enquiries regarding **Improvement Grants** which is the general experience. The Minister of Housing and Local Government issued a Circular to all Local Authorities during August requesting that more publicity and action be taken to induce owners of sound, old type properties to effect modernisation of their houses. During the year, 606 premises were inspected following enquiries for Improvement Grants and of 157 formal applications for Discretionary Grants, 148 were approved. There were also 103 formal applications for Standard Grants, 95 of which were approved.

Commencing in February, the local authority again considered applications for loans on mortgage from prospective owner/occupiers of dwelling-houses situated within the city boundary, following the temporary closing down of the scheme in September, 1961. During the year, 1,106 inspections were made, each house being considered having regard to the standard of fitness as laid down in the Housing Act, 1957, together with a general survey of the district concerned. Any defects of repair found to exist have to be remedied before a loan is finalised. **Loans on Mortgage**

Where serious overcrowding is found to exist a report is forwarded to the **Overcrowding** City Architect and Director of Housing requesting that consideration be given to the rehousing of the family concerned. The majority of the families in question are living in conditions where washing and cooking facilities, water supply and sanitary accommodation have to be shared. During the year, 473 families were reported to the City Architect and Director of Housing who, unfortunately, is still not in a position to provide all the dwellings required to ensure all the people of Liverpool living under ideal conditions. Some basements are still being used as separate dwellings **Cellar dwellings** and when located, appropriate action is taken having regard to the general conditions applying at the present time. All such cases are reported to the City Architect and Director of Housing and in some instances, action is taken under the Liverpool Corporation Act, 1921, or the Housing Act, 1957.



**Houses owned  
by the Local  
Authority**

The total number of dwellings owned by the local authority at the 31st December, 1962, excluding temporary bungalows, was 75,660.

The number of houses built in the last three years under the Housing Act, 1957, Part V, is 5,426 and the number of houses built under the provisions of the Housing Subsidies Act, 1956, is 10,772.

## SHOPS ACT

Since the second world war, and the publication in 1947 of the Gowers Committee Report on the Closing Hours of Shops, there have been numerous references to the desire and the need for amended Shops Act legislation, and appeals for early action by the Government. Apart from the unsuccessful Shops Bill of 1956, there has not been any response to these representations, much to the dissatisfaction of some sections of the distributive trades, and more particularly, of enforcement authorities.

Administration of the Shops Act, 1950 and Young Persons (Employment) Act, 1938

Closing hours of shops

New problems are constantly arising and confusion increases as more anomalies and weaknesses in the law are revealed.

As time passes, however, it is becoming increasingly apparent that whilst traders and public opinion continue to be so strongly divided as to the merits or demerits of controlled trading hours, there can be little chance of such a contentious measure receiving parliamentary attention. It is indeed difficult to resolve the situation when the voting of members of the various trade organisations tend to indicate a majority desire for the retention of some form of control of evening trading, and to a certain degree in connection with the weekly half-day.

Divided Opinion

During the year considerable action has been taken following applications from trade organisations for exemption of shops in the central area of the city, from the half-day closing requirements of the Act, which has resulted in 41 classes of trades being added to the thirteen already exempted by local orders. Together with the exemptions contained in the First Schedule to the Act no less than 65 trades in the central area are now permitted to trade six days a week.

Exemption on Early Closing Day

The referendum disclosed a varying degree of approval among the various classes of trades, and whilst in many instances the majority was considerable, in others the margin was extremely small. In spite of the strength of certain applications voting revealed that eight trades were against exemption and among these were some of the food categories. Again, the margin varied considerably and in one instance 76·36 per cent of the traders were opposed to exemption.

Referendum

This referendum has provided some evidence of the division of opinion on the question of the control by legislation of closing times, but the overall success of the move towards six day trading has undoubtedly

Effects of Exemptions



created doubts in the minds of many who opposed it. One effect has been a certain change in the shopping practices of the public on the former early closing day. Whereas Wednesday morning was once a busy shopping period and all shops received their normal share of trade, customers, for the most part, now leave their shopping until the afternoon, so that food trades and others whose shops are closed at and after 1 p.m. are reported to be at a trading disadvantage.

**Extension of  
Six-day  
trading**

The six day trading facilities in the central area of the city have not yet given rise to a demand for its extension to the suburbs, although some tentative enquiries have been made. Public requirements have yet to be assessed, especially in view of the fact that it has taken some 50 years to re-establish many of the exemptions which were revoked only a few months after they were granted in 1912.

**Complaints**

In spite of the apparent trend towards the desire for the relaxing of restrictive measures, the department still receives the usual number and type of complaints regarding goods being sold after the permitted hours. These complaints all relate to small general shops and are always from small shopkeepers.

Such complaints are fully investigated either by special observations or during the course of routine visits at the appropriate times. Inspectors are engaged on special duties covering the closing requirements of the Act in respect of evenings, half-days and Sundays. These duties are usually combined with other work which includes the checking of the hours of employment of young persons, staff welfare provisions, and enquiries in respect of smoke control, infectious diseases, noise and sanitary nuisances.

**Inspections**

A total of 46,354 inspections of retail shops of all classes, cafes, clubs, hairdressers, warehouses, pet shops, also places of entertainment have been made during the year. These are in addition to the routine and special visits to shops on the early closing day, at night, and on Sundays which totalled 26,614.

**Welfare  
Measures**

New measures for dealing with the health, welfare and safety of employees in shops, offices and railway premises have recently been published in the Offices, Shops and Railway Premises Bill, dated 1st November, 1962. Whilst the proposals bring about a number of changes, which at present require some clarification, the prospect of at last having new and improved powers is indeed encouraging.

The existing welfare provisions have been dealt with fully during the year, together with the requirements for meal intervals, assistants half-holidays, compensatory leave in lieu of Sunday employment, and the supervision of the hours of employment of young persons (under eighteen years of age). This work has been done during routine inspections and special enquiries. The infringements reported were of a technical nature and were dealt with by the responsible persons either as the result of informal action or on receipt of a notice.

Work in connection with the provisions of Section 42 of the Liverpool Corporation Act, 1955, and the Byelaws made thereunder, in respect of hairdressers, has been of a routine character, mainly concerned with the registration of new businesses, transfers to new owners and follow-up inspections on the completion of structural and other works.

The problem of the use of dwellinghouses continues to necessitate careful and sometimes prolonged enquiries. The presence of these private operators is a constant source of annoyance to properly established hairdressers and of concern to this department. Whilst some are, no doubt, fully trained persons and conduct their business in a fairly satisfactory manner, many evade planning approval, the payment of additional rates and taxes, and trade outside the permitted hours, in the evenings and on Sundays, in contravention of the Shops Act. These establishments are so concealed that it is almost impossible to locate them and the risk to public health arising from poor hygienic standards and inadequately equipped facilities in such places is a matter of importance. When it is ascertained that a house is being used for hairdressing the facts are first referred to the City Planning Officer and an inspection of the premises is made by a public health inspector, who fully advises the occupier of the department's requirements. This action has resulted in the businesses being closed voluntarily by the persons concerned.

During the year 27 new registrations and 48 transfers of ownership were dealt with, and the total number of hairdressers and barbers on the register at the end of the year was 704. There were 287 inspections and 67 infringements were dealt with by special letters.

There are 48 cinemas, theatres and other places of entertainment in the city and evening and day visits were made to all premises. 25 defects were found and suitably dealt with by the managements.



Inspections of bowling centres and dance halls have also been carried out and appropriate informal action taken where necessary.

**Pet Animals  
Act, 1951**

**Licensing**

There were 58 licences issued during the year in respect of persons carrying on the business of dealers in pet animals. 122 visits were made to these premises and 27 infringements were dealt with by special letter. The Liverpool Fire Service dealt with fire precautions and their recommendations in a number of cases were made special conditions of the licences.

**Market  
Stalls**

Market stalls from which pets are sold were the subject of special observations on Saturday afternoons over a period of eight months. The purpose of this action was not only to deal with the problems arising from this class of trading, but also to deal with unauthorised persons who from time to time attempt to sell pet animals from the kerbside. On the rare occasions that anyone was found apparently trying to sell a dog or other pet it was not possible to take any action because when the person became aware that they were being subjected to the attention of an inspector, they immediately left the area. However, this period of action obviously resulted in the prevention of illegal and undesirable trading in pets, and, from time to time, further steps will be taken to discourage or to eliminate this illegal form of selling.

**Re-develop-  
ment of  
Market  
Area**

This problem may be removed in the near future when the present market is closed and the site and surrounding area is re-developed. Whilst the Act permits the sale of pet animals from a stall or barrow in a market, it is hoped that the present form of trading will not be transferred to another location.

## FACTORIES INSPECTION

The new Factories Act which came into operation in April, 1962, has not made any significant change, in so far as the responsibilities of district councils are concerned, in industrial premises. The administration of the major part of the Act rests with H.M. Inspector of Factories, but certain duties remain with the district councils, particularly in factories where there is no mechanical power and a systematic inspection of factories is essential to ascertain if the appropriate requirements of the Act are being complied with.

Slaughterhouses are now defined as factories under the new Act and in view of this change of status it was found desirable to discuss many matters with H.M. Inspectorate, particularly in view of the requirements laid down by the Slaughterhouses (Hygiene) Regulations, 1958, which to some degree, are analogous to the Factories Act. This department has always appreciated the value of co-operation with H.M. Inspectors and this policy has been a pronounced advantage when dealing with matters relating to industrial nuisances and places where food is manufactured.

In the case of food factories the department is mainly concerned with the production and supply of clean and safe food, but many of the basic requirements necessary to ensure that this will be achieved are also essential to the health and welfare of factory workers and the high standards with regard to environmental and personal hygiene which are demanded by this department in food premises is of benefit to the administration of H.M. Inspectors who are concerned with the health, welfare, and safety of the employees.

Under Section 153 of the Factories Act, 1961, the Medical Officer of Health is required to include in his annual report, particulars with regard to the administration of the Act and the prescribed particulars are given in the statistical appendix. (Table No. 56.)

The Factories Act, 1961, requires employers of outworkers to submit returns twice a year, giving the names and addresses of persons who undertake this work. The premises in which they operate are visited to ensure that environmental conditions are satisfactory. Details are as follows:—

Number of outworkers returns during the year	...	...	...	368
Number of outworkers returns received from other authorities	...	...	...	4
Number of outworkers referred to the Medical Officers of Health of districts outside the City	...	...	...	38



**Offices and  
Workplaces****Proposed  
Legislation**

Earlier in the year the Government declared that it was their intention to promote legislation affecting the health, welfare and safety of persons working in offices, shops and railway premises. The reaction to this announcement by persons concerned in business and commercial activities has affected the department to some degree as there has been a noticeable fall in the number of complaints of unsatisfactory environmental conditions. On the other hand there have been many requests by business executives and architects for technical advice and guidance on environmental matters in anticipation of the proposed legislation.

When the proposed Government bill was published in November, it was found to include many provisions which would benefit office workers and should be a valuable instrument in securing satisfactory working conditions for a group of workers who have not hitherto enjoyed the advantages of protective legislation as have other industrial workers under successive Factories Acts.

**Sub-standard  
Office  
Conditions**

Previous annual reports have drawn attention to the deplorable conditions in which many clerical workers have to carry out their daily tasks and it is extraordinary that, at the present time, there is no legislation to enforce the provision of adequate lighting, heating and washing facilities for persons engaged in sedentary duties which are essential requirements both from a health point of view and in the interests of efficiency.

**Visits to  
Offices**

The 3,900 visits to office buildings which have been made during the year have given an opportunity for obtaining information with regard to environmental conditions and welfare arrangements which will be useful when the proposed Act comes into operation. Experience gained in this way will expedite action at the appropriate time and enable the department to assess the extent of the problem of securing compliance with the anticipated legislation. Contact made with business firms during this period has shown that there is a desire to raise the standards of the various factors which make for satisfactory working conditions.

**Workplaces  
other than  
Shops and  
Offices**

Several classes of non-industrial employment are associated with premises which do not come within the term "shops and offices" and protective legislation is needed in these cases. It is conceivable that the new Act will apply to this type of indeterminate employment, but the Bill is not clear on this point and will probably be clarified before the final draft is presented to Parliament.

These agencies are licensed annually and controlled by bye-laws made under the Liverpool Corporation Act, 1927. Periodic visits are made to ensure that the conduct of these businesses is satisfactory and that the provisions of the bye-laws are being observed. At the end of the year 32 licences were in force permitting agencies of this character to operate within the city.

This Act controls the cleanliness of filling materials used in the making of upholstery, bedding and toys. Manufacturers of these articles who use the classes and type of filling materials which are defined in the Act must be registered. Premises where rag flock is manufactured, stored or sold are required to be licensed and the number of firms operating under these conditions are:—

Licensed to manufacture rag flock...	...	1
Licensed to store and sell rag flock	...	8
Registered for use of filling materials	...	81

Samples of filling materials which may be taken, must conform with the standard of cleanliness laid down by regulations; 33 samples were submitted to the prescribed analyst during the year.

Filling materials	No. of Samples
Rag flock ... ..	16
Layered cotton felt ... ..	2
Coir fibre ... ..	2
Algerian fibre ... ..	4
Hair ... ..	3
Feathers ... ..	1
Kapok ... ..	2
Woollen felt ... ..	3

Two samples of rag flock contained one and seven parts respectively of chlorine per 100,000 parts of flock in excess of the permitted amount stated in the regulations and the users were warned in both cases.



**Radio-active  
Waste**

The arrangement which has been made with the Radiation Officer of the physics laboratory of the University, the Radium Institute and the Liverpool College of Technology, with respect to the disposal of solid radio-active waste has operated satisfactorily.

The material which is only mildly radio-active is delivered to a selected point either at the University or Radium Institute and is then conveyed in a special vehicle, under supervision, to Otterspool tip. Previous contact with the City Engineer's (Cleansing) Department, ensures that the material is deposited in a prepared cavity and immediately covered with about six feet of compacted refuse and later during the same day with a further six feet of refuse.

**Agriculture  
(Safety,  
Health and  
Welfare  
Provisions)  
Act, 1956**

The provisions of this Act relate to the provision and maintenance of sanitary accommodation for persons who are engaged on certain agricultural and horticultural activities. It is the duty of the local authority to enforce the provisions of the Act and for that purpose 58 visits were made to farms, piggeries, nursery and market gardens. No offences were reported in consequence of these inspections.

## ATMOSPHERIC POLLUTION

Progress in the conversion of fireplaces within private dwellinghouses situated in the No. 10 Smoke Control Area gained impetus by the enthusiastic co-operation of owners and owner/occupiers wishing to convert their methods of home heating so as to enable them to burn authorised fuel in their appliances. A total of 12,000 houses in this large domestic smoke control area has now been made smokeless and the remaining 15,212 will be completed by the 31st October, 1963.

The improvement of existing industrial plant and the installation of modern boiler plant gives good indication of the co-operation by industrial management towards the aims of this city to reduce the high incidence of atmospheric pollution at present prevailing.

Observations on shipping have been maintained and the improvement reported last year continues. This has resulted in a reduction of warning letters sent to owners of offending vessels.

Conversion of the No. 1 boiler house at Clarence Dock Power Station took place during the past year. Of the eight boilers which comprise the station, one has been scrapped and the remaining seven have been converted from solid fuel to oil firing. The oil to be used has a low sulphur content. This conversion, together with the improved technique now in use on the boilers in station No. 2 has greatly reduced the emission of smoke and dust from the chimneys of the power station.

Discussions have taken place on many occasions this year with the architects and engineers of the Regional Hospital Board concerning the replacement of old boilers and the installation of new boiler plant at many of the hospitals situated in Liverpool. It is hoped that these proposed conversions will soon be in operation.

Considerable improvement has been achieved by electrification and further progress is being maintained.

### Smoke Control.

Two Smoke Control Orders namely Nos. 14 and 15 were submitted to the Minister of Housing and Local Government for confirmation but due to objections being lodged, a Public Inquiry was held and the decision of the

**Smoke  
Control Areas**

**Smoke  
Abatement by  
Industry**

**Shipping**

**Clarence Dock  
Power  
Station**

**Crown  
Property  
Hospitals**

**Railways**

**Confirmation  
of Smoke  
Control  
Orders**



Minister is now awaited. It is hoped that these Orders which include part of Allerton, Woolton and Church Wards will become operative during the month of June, 1964.

**Smoke  
Control  
Programme**

The programme for the complete smokelessness of the city was approved by the City Council and a progressive policy is to be followed with ultimate completion by 1970. It has been proposed that some 22,000 dwellinghouses be included in Smoke Control Orders to be submitted annually at an approximate cost of conversion of £200,000 per year.

**Survey**

A total of 6,739 visits to dwellinghouses were made by the public health inspectors in connection with proposed Smoke Control Orders.

**Local  
Authority  
Dwellings**

The dwellinghouses owned by the local authority and situated within the No. 10 Smoke Control Order total some 11,000. Of these, approximately 5,000 are smokeless and 500 houses have had their old fashioned firegrates completely removed and replaced with modern efficient appliances capable of burning solid smokeless fuel, gas or electricity according to the desire of the occupiers. A further 1,000 houses have been allocated to contractors and work is proceeding very rapidly. Every local authority owned dwellinghouse within the area will be capable of complying with the requirements of the Smoke Control Order by October, 1963.

### **Atmospheric Pollution Measurement.**

**Warren  
Spring  
Laboratory**

The investigation into atmospheric pollution measurement continues with the close co-operation of the Warren Spring Laboratory Atmospheric Pollution Division, and readings from four stations situated in Liverpool contribute to the national survey of which this city is a member authority.

### **Statistics.**

**Smoke  
Control Areas**

There are eleven operative Smoke Control Areas and a further area confirmed but not yet operative involving a total of 34,031 premises. The eleven operative areas are situated within the central part of the city and the remaining area is in south Liverpool and comprises mainly private dwellinghouses.

**Special visits**

The public health inspectors made visits in response to several complaints of smoke emission and advice has been freely given to engineers, contractors and owners of dwellinghouses whenever the need arose.

Seventy-one new furnaces were installed during the year and approval was requested in respect of 64 installations. Of these 62 were approved without modification and the remaining two were approved after further requirements were met by the proposers. <sup>New installations</sup>

It was necessary to examine 65 plans to ensure that the chimney height was sufficient in accordance with Section 10 of the Clean Air Act 1956. In three cases the architects increased the height of the chimney in order to comply with the requirements of this authority. <sup>Chimney heights</sup>



## RODENT CONTROL

There has been a further substantial reduction in the rodent population in the city by the steps taken by the rodent control section to eradicate the pests from buildings, lands and sewers during the year.

Once again it is satisfactory to report that no major infestations were found. There is every indication that infestations, generally, have greatly diminished in severity over the past years and this satisfactory situation is particularly noticeable in the dockside and central area, where serious infestations were at one time almost commonplace.

Systematic survey of lands and buildings in the dockside districts and in other places where rodents are likely to be found was again carried out and is of vital importance in the maintenance of proper rodent control as infestations are detected before they have time to develop to serious proportions.

It is again pleasing to note that many sites subject to recurring infestation are still trouble-free since they were disinfested some years ago. This situation has been brought about by the block control methods applied by the staff to remedy infestations, however slight, and of the subsequent measures taken to prevent reinfestation. A specialist rodent control staff is engaged whole-time covering all lands, buildings and sewers in the city.

### Infestation in Sewers

Although rat infestation in sewers continues to decline since the work was centralised in 1953, the very wet conditions in some sewer manholes makes the effectual baiting by bench or by the use of the standard baiting tray impracticable. Nevertheless, this problem has been mainly solved by the provision of a special type of bait container, now used with much success, after a great deal of experimental work to find the most suitable type. The position of the bait container may be varied to suit the conditions at the time of baiting. It can be readily fitted, is produced at very little cost, and is most practicable in its application. Many comparatively large poison takes have been recorded since its adoption where previous baiting had failed.

### Duties of Local Authorities and occupiers

Every local authority is required under the Prevention of Damage by Pests Act, 1949, to take steps to secure, so far as practicable, that their district is kept free from rats or mice and to enforce the duties of owners and occupiers under its provisions. To rely entirely upon enforcement of

the Act, by issuing either informal or formal notices to remedy or prevent infestation would considerably retard the speed of disinfection by the enacting process of prescribing treatments and by subsequent visitation necessary to ensure that the requirements were being carried out. It is considered that the most effective way of dealing with the problem is in the form of practical assistance to the occupiers of premises, private or otherwise, for the destruction of rats and mice without any undue delay.

The department received the fullest co-operation from other Corporation departments in the work of rodent control and the district operators applied treatments for the destruction of rats and mice as and when required on a variety of sites. These included public buildings, schools, school meal centres, abattoir and markets, public baths, parks and public gardens, Mersey Tunnel, controlled tips, sewage farms and housing development sites. Hospital management committees, electricity and gas boards and British Railways in the city readily co-operated when necessary for premises or sites under their control.

The possibility of food contamination by rats and mice always exists where they are present, and routine surveys were carried out at food factories, warehouses, retail food shops and catering establishments as a preventative measure. Continuous attention to suspected defective drains and sewers together with the remedying of defects found, in conjunction with systematic treatment of lands, buildings and sewers, has done much to remove the health dangers from rodents and the risk of food contamination by them.

Complaints relating to rats and mice to the total of 6,731, an increase of 290 over the previous year, were received and promptly investigated.

### **Precautions Against the Spread of Disease.**

It is satisfactory to report that all the rodents submitted to the Public Health laboratory for examination during the year were found to be free from plague.

Rats are carriers of the organism leptospira icterohaemorrhagiae causing Weil's disease and in order to safeguard not only the public but the sewer worker, who has to enter sewers where he may come in contact with the organism, specimens of rats caught in sewers and on the surface were submitted for examination, five from sewers and fourteen from lands and buildings and all were examined with negative results.



### Systematic Survey.

The rodent control staff examined 24,373 sites during the year in connection with systematic survey and investigation of complaints, and a further 68,734 visits were made entailing operational work and re-examination of buildings and lands during or following treatments. Public health inspectors also made, in conjunction with other matters, 109,366 inspections under the Act.

### Rodent Infestation.

#### Infestations— Buildings and Lands

During the year 4,580 sites were found to be infested, 2,638 by rats, 88 by rats and mice and 1,854 by mice only, and the majority by far were very slightly infested. Details are shown in the statistical appendix. The sites principally affected were warehouses and factories within the dockside districts as may be expected, but, with a continued fall in degree of infestation, the central areas of the city are still maintaining their remarkable decrease in rat population as a result of the steps taken year by year.

The transportation of rats and mice conveyed in goods delivered to premises was again the means of causing slight infestation occasionally during the year. Infestations brought about in this way, although now believed to be few in number, would account for ship rats being found some distance away from the dockside districts. Where evidence indicated that rats and mice had been conveyed to sites in this manner, enquiries were made relating to the consignor so that appropriate action could be taken at the source by the local authority concerned.

The rat infestations within the middle belt of the city were again mainly very slight and for the most part confined to yards and public passages.

As part of the investigations to trace the source of common rat infestations, references relating to drains to the total of 1,068 were sent to the public health inspectors, 818 relating to dwellinghouses, and 250 for business premises. Drainage tests were subsequently applied and defects were found in 497 and 123 cases respectively, and the necessary action was taken to have them remedied.

The importance of the effectual sealing of disused drains, especially at the connections to the sewer on sites where buildings are being demolished must be stressed. In certain instances where this had not been done, rat infestation of sites resulted.

It is most essential for drains undergoing construction or repair to be temporarily capped when work is left incomplete, especially overnight, as a precautionary measure against the egress and ingress of rats either from or into the sewers. When infestations occurred on such sites the necessity of temporarily sealing the drains was emphasised to the persons responsible.

The outer districts of the city were again subject generally to very slight rat infestation mostly by the pests living in their natural habitats in banks or brooks, ditches and other lands and attracted to nearby premises, particularly gardens, in search of food which is often supplied quite unintentionally by persons throwing out bread for birds. Occupiers are advised that when bread is supplied to birds it should be in the form of bread mash as in this way it is eaten more quickly by birds and cannot readily be carried away by rats to their nesting sites.

Development of agricultural land for new housing estates may cause a disturbance of rats from their customary habitats and result in their infesting premises under construction and occupied dwellinghouses. Sporadic outbreaks of minor infestation occurred from time to time on new estates, both during construction of the houses and in their early occupation. Sub-soil drainage outlet pipes in retaining walls to elevated land around new housing flats provide the means for harbouring rats, and several infestations, although slight in degree, occurred in this way during the year. Infestations of this nature attract much attention from nearby residents, especially children, and the type of treatment is accordingly restricted. Gassing treatments were applied to destroy the rats and afterwards proofing of drainage outlets was recommended to prevent recurrence of the nuisance.

All complaints received are thoroughly investigated and sometimes necessitate survey over large areas for the detection of rodents. Many of the notifications related to a stray rat seen in yards, public passages, and gardens, and much time is spent by the rodent control staff in dealing with this type of complaint. The sites affected, however slight, are treated for rodent destruction without delay as the presence of only one rat in a dwellinghouse can be a very disturbing experience for the occupants. Of the 1,627 premises affected, 522 infestations were solely confined to the external, in yards and water closets, and 770 in gardens.

The limited supply of food and facilities for harbourage available for rats in gardens necessitates their taking a wide range of movement in search of



food and cover, thereby increasing the number of sites showing traces of the pests without concentrated areas of infestation.

Occupiers generally have now grown accustomed to availing themselves of the services of the rodent control department and request assistance on the slightest sign of rats or mice on or near their premises. Details of infestations and disinfestations are shown in the statistical appendix.

### **Rodent Disinfestations.**

**Disinfestation of Buildings and lands** During the year 4,684 buildings and lands were disinfested from rats and/or mice.

**Dwelling houses** The practice of providing free assistance to the occupiers of dwelling-houses was continued during the year with a small increase in the number requiring attention for the destruction of rats and a slight decrease for mice.

**Business premises** Owners or occupiers of buildings or lands other than private dwellings who desire the department's assistance for the destruction of rats or mice are required to reimburse the local authority for the expenditure incurred. The demand for such assistance is quite appreciable and 2,019 requests, a decrease of one from the previous year, were received. Occupiers, in addition, requested the department to examine their premises at regular specified intervals on a servicing basis in order to maintain expert supervision to detect the slightest indication of rodent activity and give prompt and skilful attention when disinfestation is required. A wide variety of premises in all districts of the city are dealt with in this way and the full cost of both the inspection and operational service was charged to the occupiers concerned, the work being in no way subsidised out of the rates.

The treatments for the destruction of rats and mice were prescribed and applied in accordance with the most modern methods of rodent destruction prevailing and the infested sites within each area were dealt with at one and the same time to prearranged timetables under the block system of control. All of the occupiers concerned readily agreed to the recommendation by the department for the actual destruction of rats and mice and it was therefore not necessary to serve notices for treatments under the Act.

### **Infestations Remedied.**

Of the 4,844 infestations and reinfestations remedied during the year, 4,348 were treated by the department's operatives and of these 4,316 were

cleared by the use of poisons and the remaining 32 remedied by trapping only. The effectiveness of rodenticides properly applied is apparent having regard to the large number of infestations remedied by one poisoning treatment, namely 3,636 out of a total of 4,316. Of the others 556 required two treatments, 101 three treatments and 23 four or more treatments. The remaining 496 infestations were disposed of by the occupiers under the guidance and supervision of the rodent control inspectors or by proofing, which mainly entailed the repair of defective drains under the supervision of the public health inspectors.

#### *Calculating the kill.*

It is estimated that at least 21,063 rats in buildings and on lands were destroyed during the year as a result of poison treatments. 2,382 dead rats were actually collected during operations and 575 were caught in traps. The species of rats collected were 2,001 *rattus nowegicus* ("brown" or "common" rat) and 956 *rattus rattus* ("black" or "ship" rat). A percentage of rodents collected, 217 rats and one mouse were sent to the public health laboratory for examination, the remainder were burnt.

Although there is no reliable formula available for calculating the kill in relation to the poisoning of mice, there can be no doubt that the number destroyed by this method is quite considerable when taking into account the large amount of poison bait actually consumed by mice, namely 8,037 bunces.

#### **Rat Destruction in Sewers.**

With the main object of reducing rat infestation of buildings and lands that may have its source from the sewer, maintenance treatments for the destruction of rats in sewers were again applied during the year with satisfactory results as indicated in the table in the statistical appendix. There are 25,839 sewer manholes in the city and the total baits eaten or partly eaten by rats during the maintenance treatments carried out during the year were 2,677, 2,601 and 2,407 respectively compared with 9,329 on the initial treatment in the year 1953. Included in the 2,407 bait takes during the last treatment are 77 takes recorded after treatment of the part or whole divisions not normally treated but dealt with by annual test baiting.

In the outer districts of the city where sewers had been previously found to have little or no rat infestation, and in the divisions in which sewers had been disinfested by maintenance treatments, test baiting was applied



as a precautionary measure and details are shown in the statistical appendix. Where evidence of rats was found during the test baiting, treatments were applied to localised infestations, however slight. Of the 75 divisions wholly or partly test baited, no takes were recorded in 54 divisions containing a total of 9,163 manholes.

**References to  
the City  
Engineer**

During the work of preparing sewer manholes for baiting it was necessary to refer to the City Engineer's Department 701 items of work that required attending to before treatments were applied for rat destruction. The items included easing of manhole covers, removal of rubbish from baiting points, and clearing of choked or partly choked sewers, and prompt attention was generally given to these matters.

### **Preventative Measures.**

Conditions likely to lead to infestation or hinder the work of disinfection were at once brought to the notice of the owner or occupier of the building or land concerned. Preventative measures and works of proofing wherever reasonable and practicable were carried out as recommended during or immediately following the work of rodent destruction. Most owners and occupiers of premises showed a readiness to comply with the suggestions and advice given to them by the rodent control staff. However, where they failed to co-operate steps were taken by the public health inspectors, and eight notices, five relating to dwellinghouses and three to business premises, all for non-structural matters were served under the Act, in addition to the action taken under the Public Health Act, 1936, to have the many defective drains remedied. It is pleasing to note that during the year it was not necessary to institute legal proceedings.

## SUPERVISION OF FOOD SUPPLY

### MEAT INSPECTION AND FOOD HYGIENE

Public Health Inspectors with additional qualifications as meat and food **General** inspectors have maintained a close supervision of the city's food supplies throughout the past twelve months. Daily visits have been made to the Wholesale Fish Market, Queen Square, St. John's Retail Market, and the Wholesale Fruit and Vegetable Market at Cazneau Street, as well as to the various wholesale food warehouses situated throughout the city.

A number of investigations into food complaints, which originated from members of the public, have been carried out with regard to fitness and questions of nature, quality and substance of various foodstuffs which had been supplied by retail vendors. During the year 2,374 special food complaints made by representatives of the wholesale and retail trade have been dealt with satisfactorily in addition to the daily routine calls of inspection at the various city markets.

All poultry and game entering the wholesale market has been examined **Poultry Inspection** prior to sale to the retail trade. Following upon these inspections a total of 744 head of high grade poultry and game at a weight of approximately one and half tons was rejected during the year as being unfit for human consumption, due mainly to reasons of decomposition or refrigerator perish.

Details as to the rejection of these are set out below :—

Chickens	...	...	...	...	341
Fowl	...	...	...	...	185
Ducks	...	...	...	...	8
Turkeys	...	...	...	...	158
Pheasant	...	...	...	...	28
Grouse...	...	...	...	...	24
					744

As in 1961, an exceptionally small amount of second grade poultry from Ireland was observed on the market, and although particular attention was paid, there was no reason to reject any of these imported birds during the year.



**Fish  
Inspection**

The Wholesale Fish Market supplies an extensive retail trade throughout Merseyside and adjacent areas. During the year a total of 10,393 tons of fish passed through the Wholesale Market, in addition to 55,859 packages of poultry, and 2,166 packages of rabbits and game. The daily inspections of these commodities resulted in the rejection of some 2,569 packages at a weight of approximately 29 tons as being unfit for human consumption.

(See Table No. 70, Statistical Appendix.)

**Fruit and  
Vegetable  
Inspection**

The inspection of fruit and vegetables at Queen Square, the North Market, and at the various wholesale storage warehouses sited throughout the city has been maintained during the year. The daily examination of fruit and vegetables has resulted in the rejection of 32,736 packages at a total weight of 596 tons as being unfit for human consumption.

(See Table No. 70, Statistical Appendix.)

There was a marked increase in the rejection of both fruit and vegetables during the period under review. Large quantities of grapes were found to be contaminated by mould formations, and due to the nature of this fruit it was not possible to sort and repackage with any degree of certainty that the contamination had not been spread further by the spores.

West African yams entered the market in larger quantities than had been experienced in the preceding year, and there now appears to be a widespread retail trade for this vegetable. Perhaps, due to the comparative newness of this commodity in England, large quantities of the yams had to be rejected because of mould or perish conditions which arose during transit due to packing and storage methods. It is understood that arrangements within the trade are being made to overcome these difficulties, in view of the increasing amounts that are likely to be imported during the next few years.

**Canned  
Goods and  
Sundries**

The daily inspection of canned goods and grocery sundries has been maintained throughout the year at a variety of premises; including shops, warehouses and food factories within the confines of the city boundary. A large proportion of the foodstuffs rejected as being unfit for human consumption have been disposed of at a Corporation controlled tip. Smaller consignments which had been brought to the office for examination were, when necessary removed by the City Engineer's (Cleansing) Department, and subsequently tipped under their supervision, or destroyed by burning in the recently installed incinerator at St. John's Market.

On four separate occasions during the year, food which was inspected was found to be unfit for human consumption but suitable for further processing into animal feeding substance, or for the manufacture of technical fats. In each of these instances the foodstuffs involved were released under a signed "Guarantee of Unsound Food" to the respective pig farmers, or manufacturing concerns.

The examination of canned good and grocery sundries resulted in the rejection of some 59 tons as being unfit for human consumption. (See Table No. 70, Statistical Appendix.) A breakdown of the various categories of these foodstuffs is set out below:—

				<i>lbs. wt.</i>
Canned Meats	...	...	...	73,035
Canned Fruits	...	...	...	31,895
Canned Vegetables		...	...	17,134
Canned Fish, Milk and Soups			...	6,208
Meat and Dry Groceries	...		...	4,970

A total of 8,650 certificates of condemnation were issued to wholesalers and retailers in respect of the rejected commodities mentioned above.

During the year 1,295 visits of inspection were made under the provisions of the Merchandise Marks Act, 1887, to provision merchants, butchers, and greengrocers to ensure compliance with the enactment. In those cases where infringements were observed, advice was given to the vendors and these points were immediately corrected in the presence of the inspector concerned. Subsequent routine re-visits confirmed that the instructions which had been given were being adhered to in all instances.

Thorough inspections have been carried out during the past twelve months in respect of foodstuffs which were intended for export from this country and which were required to be accompanied by a certificate of soundness to their destination. 102 such consignments were inspected and these consisted in the main of bacon, canned goods, dried and salted fish, and various cuts or carcasses of meat. Most of these consignments were scheduled for ports in the Far East, Mediterranean countries or West Africa, and in each instance the foodstuffs examined were found to be fit for human consumption and export from this country, and the necessary certificates of soundness were issued.



**Food  
Complaints**

A total of 339 complaints were received from members of the public and each complaint was thoroughly investigated and completed to the satisfaction of the complainant.

**Central  
Purchasing**

There were 486 visits made to Corporation premises for the purpose of inspecting the food supplied under contract.

**United  
Liverpool  
Hospitals  
Board**

There were 85 visits made to food stores and kitchens of the hospitals of this group.

**Meat  
Inspection**

The number of animals slaughtered in the city during the year was again over the half million:—524,372, the second highest figure for 22 years. 100 per cent inspection was maintained on all carcasses at the time of slaughter and dressing; sometimes under most difficult conditions in the early part of the year, when freezing conditions resulted in burst water pipes and lack of steam, particularly in the piggery block. There were only eight days in the year when slaughtering did not take place at Stanley Abattoir or the private abattoir at Woolton.

**Diseased  
meat and  
offal**

The total number of carcasses condemned as unfit for human consumption was 3,575 together with part carcasses from another 12,817 animals. In addition, organs from 105,039 animals were condemned. (See Table No. 59, Statistical Appendix.) The amount of meat and offal rejected as unfit was 527 tons. These figures for condemnation are high, but apart from reflecting the volume of slaughter and inspection, it must be remembered that Stanley Abattoir deals with every grade of livestock from the superlative Scotch and Irish bullocks, to the manufacturing "boner" cows culled from herds all over the country. Liverpool meat market, because of the variety of quality in carcase meat offered and the quantity available, is probably the busiest and relatively the cheapest market in the country.

**Pig  
carcasses**

This year, the number of pig carcasses totally condemned was 1,052, more than double the number last year (501). The dramatic increase was almost entirely due to condemnation of swine fever, infected pigs and contacts. Indeed, at one time, almost the entire country was under swine fever restriction orders by the Ministry of Agriculture, Fisheries and Food. The disease spreads rapidly among pig herds and is probably the major problem confronting breeders today. For example, one breeder sent in 150 pigs for slaughter—43 were found to be infected and condemned and subsequently over 1,000 pigs, large and small, were slaughtered off in a desperate attempt to prevent further infection-spread amongst other pigs

on his premises. Since compensation is not paid for swine fever and contact pigs are slaughtered—as is the case in foot and mouth disease, the pig breeder can face economic ruin through loss of breeding stock as a result of one severe outbreak.

During the year it has been noted that there is an increasing number of pig carcasses which on inspection show abscessed conditions clearly due to inoculation, in shoulder or flanks. In one instance the steel needle used had broken off and was embedded in the leg muscle.

Pyæmic infections also show a steady increase during the past year, the number of pig carcasses showing bone and liver lesions was 69, all being condemned.

The incidence of tuberculosis in pigs was much the same as last year, twelve carcasses and 1,756 part carcasses (ten carcasses and 1,657 part carcasses in 1961), but the percentage figure was 1·50 per cent—1·53 in 1961.

Calf carcase condemnations—453 carcasses—were similar to last year Calf (445). Again acute enteritis or pyæmia (joint ill) accounted for the carcasses largest number of condemnations.

The practice of sending week-old “bobbie” calves for slaughter has declined, and there are fewer good, milk fed calves handled except at Eastertime. It does appear that large numbers of calves (in particular, bull calves), an essential, unavoidable, but uneconomic by-product of the dairy industry, are sent for slaughter with indecent haste and small regard to feeding or proper care. The age of the bulk of the calves slaughtered was between one week and three weeks.

During the year, 1,909 carcasses together with 5,532 part carcasses were Sheep condemned. This figure is materially higher than last year (1,418 and carcasses 4,210 part). Hill lambs and sheep were poorer in quality than hitherto, probably one result of the bad weather conditions towards the year end. An increase was noted in the number of sheep affected with liver fluke (distomatosis), and an abnormal number of good quality lambs were affected with arthritis of the hind leg joints.

The number of breeding ewes and rams culled from breeding herds and sent for slaughter at the back end of the year was similar to last year and again oedematous emaciation, chronic arthritis, peritonitis, pleurisy and distomatosis accounted for some 50 per cent condemnation of the rams



slaughtered. An increase was noted in the number of prescapular and inguinal inoculation scars which were fibrously septic, in good quality lamb carcasses.

**Tuberculosis eradication measures**

The number of carcasses totally rejected for tubercular infections was seven cows and eleven bullocks. This is a most satisfactory reduction on last year's figure of twelve cows and 32 bullocks. Report is made to the Ministry of Agriculture, Fisheries and Food, of all tubercular carcasses found during routine inspection, giving details of tattoo marks, auction mart numbers and name of the buyer. These particulars enable the Ministry's veterinary inspectors to trace contacts and to re-test the herds from which the diseased animals came.

**Reactors**

This line of action is quite distinct from the routine field work in regard to tuberculosis eradication undertaken by the Ministry.

During the year, a total of 112 animals consisting of 86 cows, fifteen heifers, six calves and five bullocks were sent in for slaughter, and post mortem examination under the eradication scheme. As a result of inspection, one carcass was totally rejected for acute widespread infection and portions from another nineteen carcasses; in the remaining cases, organs only were rejected.

**Cysticercus Bovis. (Measly beef)**

The number of carcasses infected with cysticercus bovis cysts rose to 38 (22 in 1961). These cysts, if consumed in under-cooked meat, may lead to tape worms in the human being. For this reason, all infected beef carcasses (mostly good quality meat) are deep frozen for three weeks, and this treatment renders all the minute cysts sterile.

**City Abattoir slaughtering**

The number of animals slaughtered and inspected was 480,067, detailed as follows:—

Sheep	Calves	Pigs	Heifers	Cows	Bullocks	Bulls
331,387	10,789	72,182	806	32,671	31,315	917

**Private Abattoir (bacon factory)**

The number of pigs slaughtered at the private abattoir in the city was 44,305, all carcasses and offals being inspected at the time of slaughter, on the premises. Towards the end of the year, this slaughterhouse was designated as a bacon factory under the Ministry of Agriculture, Fisheries and Food scheme for quality bacon production. Top grade pigs of selected

weight, purchased on contract from special breeders, are humanely slaughtered, dressed and specially singed, using oil flame bunsens (which keeps the skin or bacon rind soft). The carcasses are chopped through in such a way that the head and the vertebrae bones can be detached, leaving the carcase in two sides ready for curing.

Fibre glass tanks, resistant to brine, are used in the curing process and subsequently, the sides of bacon are dried and kept in a cool refrigerated chamber.

Complete supervision on the part of the firm concerned, hygienic methods and critical inspection by the meat inspection staff at all stages from the reception of the live pig, until the final despatch of the cured bacon, has resulted in the production of a quality commodity.

The carcasses or offals of 121,431 animals were found to be diseased at the time of slaughter, and this figure is approximately 23 per cent of the total number of 524,372 animals which were slaughtered in the City. The number of whole carcasses condemned as unfit for human consumption was 3,575 (2,557), together with part carcasses from 12,817 animals (11,003); whilst in addition, organs from 105,039 animals were condemned for disease. (See Table No. 59, Statistical Appendix.)

The total quantity of diseased meat and offal found to be unfit for human consumption at the time of slaughter, together with the meat and poultry rejected on the wholesale market was 527 tons—this amount comprised 184 tons of meat and 343 tons of offal. In addition a further seven tons of canned goods were rejected as unsound. All this meat was voluntarily surrendered and in no case was it necessary to apply for a magistrate's order for formal condemnation. This co-operation by the wholesale traders, farmers and importing firms, reflects their confidence in the fair judgement of the meat inspectors and provides the highest standard of protection for the meat consuming public served by the Liverpool market.

All diseased meat and offal is dealt with in the abattoir at the Council's by-product plant; being rendered down and sterilised to produce inedible tallow and meat meal for animal food manufacture. In addition to dealing with diseased meat and offal, the plant handles all blood from the slaughter units (other than the quantity collected under hygienic precautions from inspected healthy carcasses and used for manufacture

**Diseased conditions**

**Condemned meat and offal**

**Disposal of condemned meat and offal**



for human consumption), in a blood drying plant which produces valuable fertilizer. The meat traders as owners or agents of this meat and offal, are paid by the Council for the weight condemned as certified by the meat inspection records, payment being made by the Markets department.

Stanley  
Meat  
Market

The large quantities of frozen or chilled meat, frozen lamb and mutton carcasses, together with packages of frozen offal “pitched” daily on the market are subjected to inspection. During the year this meat was “pitched” in prime condition, particularly the fresh carcase meat from Yugoslavia (which last year caused concern on two major occasions). This meat, packed in insulated truck container vans, cooled with carbon dioxide blocks, railed across Europe, via sea ferry to Harwich, then brought by express train to Liverpool, was a ready selling commodity on the market.

Rhodesian  
meat

The chilled hindquarter beef from Rhodesia was satisfactory; the use of cloth tampons pushed into the aorta artery to stop blood-leak has been discontinued following last year’s suggestion to the importers by this department.

South  
American,  
New Zealand,  
Australian  
and Irish  
meat

Diseased  
meat  
(animals  
slaughtered  
outside  
Stanley)

South American, Australian and New Zealand, as well as Irish beef, mutton and lamb arrived in good condition. It is ironical to record that from amongst all this meat and offal handled at Stanley market after being transported from different continents, the meat which causes most concern, and results in more condemnation for disease and unfitness, was meat sent in from centres within easy motoring distance of the market. Some fifteen tons of fresh beef, mutton, pork and veal, sent in for sale, from these rural areas and found to be diseased on routine re-inspection after arrival at Stanley, were condemned.

Carcases and meat dealt with in this market, *excluding* the meat and offal from the 524,372 animals slaughtered in the City was as follows:—

Meat  
Market  
turnover

Origin	Beef Hinds/Fores	Carcases Mutton/Lamb	Carcases of Pork	Carcases of Veal
Imported chilled or frozen ... ..	159,759	892,095	2,015	—
Slaughtered outside Stanley Abattoir ...	70,925	174,866	86,838	7,606

In addition to the above, some 134,000 packages or boxes of meat were handled.

The number of bovine animals sent into the Stanley Abattoir for slaughter and post mortem examination under the tuberculosis eradication scheme was 112 (117 in 1961). A detailed inspection was made in each case and the extent of the infection notified to the Ministry's officers. One carcass was totally condemned for acute widespread tubercular infection and portions, for example, chest walls, from nineteen other carcasses. In the remaining instances, organs only were rejected.

The acts requires that no person may proceed to stun or slaughter an animal in a slaughterhouse unless he holds a licence granted by the Local Authority. During the year, 163 licences were granted to slaughtermen and cutters of the Shechita Board. In addition 124 licences were granted to Mohammedans, mostly seamen, for the ritual slaughter in Stanley Abattoir of sheep, the carcass meat being destined for Mohammedan ships' crews. It is interesting to note that these Mohammedans will only eat meat marked by their own chosen representative and refuse meat (although ritually slaughtered and marked) by Mohammedans from a different ship.

The meat conveying vehicles working out of Stanley Market are inspected daily to see if the requirements of the regulations are observed. Defects are speedily remedied, and in general a good standard is maintained. An increase in the number of shooting brake type vehicles, specially constructed with metal trays in the rear, for carrying small quantities of meat, has been noted. The long distance transport vehicles are amongst the best in the country. Most are fitted with mechanical refrigeration units, and some vehicles can carry 100 whole sides of beef, each hanging from rail hooks. Delivery to London, Midland and South Coast markets can be made within the day, the meat being delivered in perfect condition.

The regulations, coming into force by stages, since 1959, are designed to secure hygienic conditions in the slaughter of animals, handling of meat, cleanliness of operators and satisfactory conditions in regard to structure, lighting, drainage and the general operation of all slaughterhouses. Details have already been given in previous reports, of improvements which have been carried out at Stanley Abattoir to comply with the regulations. During the year, perhaps the most difficult problem of all—that of removal of bovine stomachs, intact and unopened from the slaughter bays—was tackled.

**Tuberculosis  
(Slaughter  
of Reactors)  
Order, 1960**

**Slaughter of  
Animals Act,  
1933-1954**

**Food  
Hygiene  
Regulations,  
1955**

**Slaughter-  
house  
(Hygiene)  
Regulations,  
1958**



**Bovine  
stomachs****Former  
practice of  
disposal**

Stanley Abattoir, opened in 1931, was specifically designed as the most up to date plant of its day. As part of the slaughtering operations, bovine stomachs (four in number) were detached from the carcase, separated on the floor, and the two large stomachs (rumen and reticulum) were cut open and the stomach ingesta content discharged through a stainless steel circular chute into the cellar beneath the killing floor, where metal bogies were positioned to receive the ingesta.

**New  
requirements**

The new regulations require that the stomachs be cut from the carcase intact and removed from the killing floor, to be separated, opened and emptied in a place other than the slaughter-bay. This requirement posed quite a problem, the most obvious solution was that of dropping the whole four unopened stomachs into the cellar via the stainless steel chutes, and then separating, opening and emptying. But this course had to be rejected in the face of costly structural alterations, difficulty in moving the edible stomachs back to ground floor level and the undesirability of operatives having to work all day in the cellar.

Experiments were tried by constructing saucer-shaped concrete hoppers round the circumference of the stainless steel chutes, where, in theory at least, the stomachs were not actually opened on the slaughter floor. However, the unavoidable accumulation of ingesta rendered this solution useless. Finally, after much thought and discussion with the meat trade members, Markets Department officials and the Medical Officer and his staff, together with Ministry officials and reports to the committees concerned, it was decided to "wall off" (using steel sheets), one of the centre slaughtering bays for use as a separating and opening depot, for all bovine stomachs arising from routine slaughter. At present the operations (which have been officially approved by the Ministry of Agriculture, Fisheries and Food), consist of collecting the four stomachs as cut from the carcase, in a metal barrow, quickly transporting them to the central bay where separation, opening and emptying and primary washing are completed. The ingesta is discharged through the existing stainless steel chutes into bogies positioned in the cellar. These bogies are periodically moved by using an electric truck which pulls them to the lift, whence they are conveyed to the rebuilt manure bay and discharged. Although this method of handling stomachs works in practice (and creaks under pressure of numbers), it is merely a temporary expedient to conform with the spirit of the law as it

**Temporary  
solution**

exists; and cannot be seriously accepted as a permanent solution. Such a **Final solution** solution will only be achieved by the installation of a cattle line—slaughter layout, to replace the present booth system which has served well for the past 32 years.

During last year, some 80 tons of liver affected with distomatosis, were **Pharmaceutical products** sent to the pharmaceutical manufacturers for processing into liver extract. In addition, various glands used for medicinal preparations, for example, thyroids, ovaries, pituitaries, pancreas, adrenals, para-thyroids, taken from sound carcasses after inspection, were collected and sent for processing.

It is pleasing to record that all the requests from various official sources **Specimens for laboratories** for specimens, have been met in full during the year. Supplies of blood, eyes, uteri, spleens, hearts, cysts, tumors and parasites were collected by the staff, for research work and use in various departments of the Liverpool University, and in hospital laboratories. Morbid specimens were also set up for the examination of the Royal Society of Health, and the veterinary school of Liverpool University.

The courses of instruction for persons preparing for examinations in meat **Training Classes in meat and food inspection** and food inspection or food hygiene were well attended. 37 students received a grounding in the theory and practice of meat inspection; fish inspection, milk supplies and the law relating thereto.

This year was the sixth year of the operation of the training scheme approved by the Council in 1956 for public health inspectors. Of nine trainees prepared for the examination for competency in meat and food inspection, eight were successful in the examination and awarded the certificate of the Royal Society of Health for competency in meat and food inspection.

The Medical Officer of Health is responsible for ensuring the safety of **The adulteration of food and drugs** food supplies and the public health inspectors specially qualified in food inspection and sampling are responsible for routine sampling of food and drugs, with the object of ascertaining that they are of the nature, substance and quality of the article demanded, by submitting them to the Public Analyst for analysis. At the same time, a close scrutiny is made of labels and advertisements to check that claims are not misleading. These responsibilities under the Food and Drugs Act, 1955, and the various Regulations and Orders made under this Act, entail the constant vigilance of the inspectors.



Appropriate action is taken in cases where samples are found not to be genuine. In some cases legal proceedings are instituted; in others advice is offered to the vendor and a cautionary letter sent, whilst in other instances the manufacturer or packer is advised of irregularities or technical labelling offences.

During the year, 3,958 samples of food and drugs were taken or purchased and of this number 174 or 4·3 per cent were found not to be genuine or otherwise irregular. This represents an increase on last year's figure, which was 3·8 per cent.

The samples obtained included 873 formal and 3,085 informal. An informal sample is one procured without the statutory intimation to the vendor that it is to be analysed. Valuable information as to irregularities may be obtained this way and a wide variety of food and drug preparations checked.

#### **Legal Proceedings**

Statutory action was taken in respect of milk, dried soup powder, and fish cakes, and fines totalling £147 0s. 0d. with £34 1s. 0d. costs were imposed.

#### **Ice Cream**

During the year 421 samples of ice cream, lollies and frozen confections were submitted for chemical analysis or bacteriological examination. A total of 363 ice cream samples were examined bacteriologically and 253 were found to be Grade 1; 51 Grade 2; 31 Grade 3 and 28 Grade 4. Samples in Grades 1 and 2 can be classed as satisfactory. Consistently unsatisfactory bacteriological results entail a thorough examination of the processing plant and an investigation into possible sources of contamination and unsatisfactory cleansing and sterilising. Analysis of 51 ice cream samples proved one to be below standard; all other samples complied with the requirements of the Food Standards (Ice Cream) Regulations, 1959.

An interesting feature of the ice cream trade in Liverpool this year has been the introduction of soft frozen ice cream machines into mobile vehicles especially adapted for the work. Liquid mix, which has already been heat treated during its manufacture, is frozen in these machines and extruded into cornets in a soft frozen condition direct from the machine. This method provides a very acceptable confection which is becoming increasingly popular amongst young people. The machines are cleansed and sterilised by chemical agents in accordance with a code of practice laid down by the manufacturers.

Registration of ice cream manufacturers and vendors is required under the Food and Drugs Act, 1955 and the Liverpool Corporation Act, 1936. In the case of soft ice cream it is considered that the reconstitution of the ice cream mix and the freezing process is part of the manufacture and therefore registration is carried out by the local authority.

In addition to the bacteriological examination of ice cream and milk, during the year 241 samples of other foods were examined for their suitability for human consumption, including examination for food poisoning organisms. The types of food selected were those which were to be eaten uncooked or without further preparation, and included meat pies, sausage rolls, sandwiches, cooked meats, cream filled cakes, shellfish, meat and fish pastes. The results generally were satisfactory and in no case was salmonella contamination reported. The above total includes samples which were examined bacteriologically as a result of complaints made by the general public and enquiries incidental to food poisoning.

**Bacterio-  
logical  
examination  
of  
Foodstuffs**

Regular routine samples were taken from milk processing firms and milk producers within the city, and the standard of cleanliness and efficiency of pasteurisation and sterilisation is very satisfactory. The total number of milk samples submitted to the Public Health Laboratory for examination was 2,498 comprising 2,302 heat treated milks, 184 tuberculin tested (raw) milks and twelve undesignated raw milks.

**Bacterio-  
logical  
examination  
of Milk**

Six of the 2,302 heat treated milk samples examined failed to satisfy the phosphatase test for efficiency of pasteurisation; in every case the processing plant was examined and the fault immediately rectified. 190 samples failed the methylene blue test for bacterial quality. 126 of these failures were from samples of heat treated milk procured from automatic vending machines, and 59 from samples processed outside the city area. In each case of failure representations were made to the processors concerned and advice given.

Fourteen methylene blue failures were reported from the 184 tuberculin tested raw milk samples taken, and the result of guinea pig inoculation of the milks tested for the presence of tubercle bacilli proved negative in every case.

The milk supply to hospitals and aged persons hostels is regularly sampled at the time of delivery and 131 samples were tested chemically and bacteriologically. Three samples were found to be unsatisfactory on the methylene blue test for keeping quality.

**Milk supply  
to hospitals  
and  
aged persons  
hostels**



- Milk supply to schools, day nurseries and school canteens**      There were 186 samples taken at these establishments and four proved unsatisfactory on the methylene blue test for keeping quality.
- Milk and Dairies (General) Regulations, 1959**      The whole of the city is a specified area in which only heat treated milk or raw milk of tuberculin tested designation may legally be sold to the public, and a small percentage of the daily consumption consists of this raw milk. 184 samples of tuberculin tested milk were taken and 130 were specially tested for brucella abortus infection. These samples were taken from milk produced within the city area and from farm bottled milk from outside areas. The milk from one herd outside the city area was found to be infected with brucella abortus. Immediate measures were taken to have this milk pasteurised, and this treatment continued until the herd was cleared by the veterinary authority.
- Bovine tuberculosis**      All samples taken from city herds were found to be free from mycobacterium tuberculosis.
- Fertilisers and Feeding Stuffs Act, 1926**      Liverpool is a centre for the milling of animal feeding stuffs. During the year 57 samples of feeding stuffs and fertilisers were obtained for analysis. All samples, with minor exceptions, were found to conform with the manufacturers statutory statement.
- Pharmacy and Poisons Act, 1933**      This Act, together with the Poisons Rules, regulates the sale of poisons. It is the duty of the local authority to carry out the provisions of Part II of the Act, which deals with the registration of persons selling Part II poisons. Listed sellers are usually owners of hardware stores, chandlers and multiple grocers' shops. The number of listed sellers on the current register is 562.
- Milk Supplies The City's milk supply**      The duties relating to the supervision and inspection of food and food premises are the responsibility of the public health inspectorial staff and these duties include the administration of the legislation governing the registration of milk distributors and their premises, the issue of licences in support of the sales of designated milk handled by them, and the treatment, storage, distribution and sales of milk effected by them. The work entailed included the issue of 113 new registration certificates, 98 licences required in support of the sale of designated milk and 2,593 visits were made.
- Milk Distribution**      The measures to be taken with regard to the securing of a clean and wholesome milk supply are most important in view of the nature of this valuable food and most careful supervision is essential at every stage from

its receipt at the processing plant for heat treatment, bottling and storage, down to the delivery to the consumer, who maybe in the home, school, hospital or factory canteen. Public health inspectors keep a close watch on all the links in the chain of milk handling treatment, storage and distribution. It is incumbent on each inspector to be assured that the requirements of the Milk and Dairies (General) Regulations, 1959 and the Milk (Special Designation) Regulations, 1960, are at all times being strictly complied with.

All milk is produced under the supervision of the Ministry of Agriculture, Fisheries and Food, who register all such producers as dairy farmers, but the handling, treatment, storage and distribution of milk, other than that which is produced and distributed by the registered dairy farmer, is controlled and supervised by the local authority in whose area the premises are situated and they must be both registered and licensed by that authority. This entails a frequent check on all registered premises and routine visitation revealed that 37 businesses had ceased to operate, 40 dairies required to be transferred from one person to another and 46 new registrations were required to be effected. All premises were inspected on receipt of registration application, and when the necessary requirements were completed they were recommended for approval.

All milk distributed in Liverpool bears a special designation according to its treatment and all milk distributors must hold a pre-packed milk licence. Under the Milk (Special Designation) Regulation, 1960, these licences are renewable every five years.

During the year 674 visits were made to pasteurising plants for the purpose of sampling when the installations were in operation. Special attention is paid to the temperature, the functioning of the indicating and recording instruments and the holding items. There are five high temperature short time pasteurising plants in the city consisting of a number of separate units of capacities carrying from 850 gallons per hour to 2,500 gallons per hour. In addition to the foregoing units, three establishments are fitted with holder or batch type pasteurisers. In each instance the units are coupled to mechanical bottle washing plants, filling and capping machines, and adequate cold room accommodation. In addition to the above premises 306 visits were made to three sterilising plants for the purpose of sampling and checking the component parts of each plant. The processing dairies continue to be well maintained and very effective in operation.

**Registration  
of Dairies**

**Designated  
Milk and  
Licensing**

**Milk  
Pasteurisation  
and  
Sterilisation**



**Liverpool  
Corporation  
Act, 1921,  
Sections  
475-483**

This Act empowers the Liverpool Corporation to grant licences to all persons keeping dairy cows, store cattle and pigs; subject to the premises being of the standard required. There are 24 cowsheds and 42 piggeries in the city area and 151 visits were made during the year. All infringements were dealt with to the satisfaction of the department.

**Food  
Hygiene  
Special  
Survey**

The special duties, commenced in the latter part of 1961 in accordance with the instructions of the Health Committee, were continued this year when further detailed attention was given to food premises and street traders.

**Food  
premises**

**Day-to-day  
cleaning**

In respect of food premises of all classes of trade and size it was found that the problem which required the greatest attention was that of day-to-day cleaning, particularly of storerooms, passages, staircases and basements. Frequently, this problem is associated with inadequate storage space for stock and returnable containers and the untidy arrangement of goods, partly due to the hasty removal of commodities from their containers as sales reduce the displays in the shop. Floor and wall surfaces become neglected where stocks cover or screen them for long periods of time, and shelves and fittings are similarly affected when they become inaccessible. Where these conditions are found there is frequently some difficulty connected with insufficient staff, and whilst some shops employ persons for cleaning work only, economic factors preclude others from providing this additional assistance.

**Staffing  
problems**

The problem of staffing these food establishments is not always one of numerical sufficiency, but sometimes one of personal inefficiency, and whilst it is appreciated that standards are improving and a wider perception of the fundamentals of food hygiene is evident, it cannot be stressed too much that there is still a serious absence of adequate training facilities provided by proprietors for those engaged in the handling of food.

**Pre-packing  
of food**

Fortunately, this personnel problem is considerably offset by the ever widening development of the pre-packaging of foods, and the advent of the self-service shop and the supermarket has introduced a new method of merchandising, which has necessitated this desirable improvement. The competitive trading of these classes of shops has, however, created certain difficulties for the small shopkeeper, who has been compelled to devise trading methods which will preserve his business. This has resulted in the

development of voluntary group-buying which, in the main, has brought the advantages of pre-packed food to the small grocer and general shop dealer.

Many small shops are being modernised to meet the present trading trends, and new display fixtures and refrigerated counters and cabinets are a feature of this commendable improvement. The materials of these modern units not only enhance the appearance of the shop, but enable the task of cleaning to be carried out easily and with encouraging results. It is desirable, however, that this new-look conception should be extended beyond the shop into the rear premises, for often the "clean food" aspect of the shop is nullified by unsatisfactory storage facilities and unhygienic methods of handling open food. **Shop Modernisation**

During the year 34,604 visits were made to retail food shops, cafes, bakehouses, licensed premises, food factories, street traders, etc., and 6,125 infringements were dealt with in respect of these premises and traders. **Inspections of Food, premises, etc.**

Whilst concern has been expressed regarding some aspects of achieving and maintaining a higher standard of hygiene among food handlers, it must be recorded that the majority of traders and proprietors in the food trades readily co-operate with the local authority, and in many instances satisfactorily maintain their businesses, without the necessity of departmental intervention. **Traders' Co-operation**

Arising out of the action taken in respect of the food trade, a total of 66 informations were laid and as a result of the prosecutions, fines totalling £217 and £23 11s. 0d. costs were imposed. **Legal Proceedings**

The work carried out, in accordance with the special instructions of the Health Committee, included the inspection of mobile shops and other forms of street trading in food in the City centre and in the suburbs. It will be appreciated that many of these traders conduct their businesses from properly equipped and maintained vehicles and stalls, and furnish a useful and acceptable service to the community, especially in outlying areas. There is, however, a serious problem arising from the number of unsatisfactory traders who, in some instances, give little attention to hygiene and show the minimum desire for co-operation with the local authority. The supervision of this class of trader is rendered difficult by the fact that there are few restrictions whereby some measure of control can be exercised. These **Street Trading**



traders are not subject to the trading hours fixed by the Shops Act, and by the nature of their trade can move from district to district without prior permission or by agreement with the various authorities concerned. However, every effort is made to locate and inspect these vehicles, barrows and stalls, and to enforce the requirements of the Food Hygiene Regulations and the Food and Drugs Act, 1955.

A total of 559 inspections of mobile shops, barrows, "hot-dog" stalls, etc., have been made during the year, and 445 infringements dealt with either by warning letter or by legal proceedings. 51 informations were laid against street traders and fines totalling £145 were imposed for offences including:—

- (a) dirty and defective vehicles;
- (b) the placing of open food lower than 18 inches from the ground;
- (c) the sale of unsound food;
- (d) persons smoking whilst handling open food;
- (e) the stall did not bear conspicuously the name and address of the person carrying on the business;
- (f) failing to maintain an adequate supply of water, both hot and cold, in connection with a catering business carried on from a stall;
- (g) failing to provide and maintain adequate supplies of soap, clean towels, etc.

This action has produced a marked improvement in many vehicles, etc., and in the standard of hygiene. It is significant that a number of the street traders dealt with have ceased to operate, because of the difficulty in providing and maintaining a satisfactory stall.

#### Cafes

Cafes, restaurants and snack bars have also received considerable attention during the year as part of the survey authorised by the Health Committee. The standard in these premises is, in most cases, satisfactory, but, as in food shops, the problems of inadequate space and staff difficulties create conditions which require the maximum possible supervision by the management and this department. The facilities provided or organised by certain cafe proprietors for the training of staff are regrettably insufficient, and there is reason to believe that some proprietors and managements are not properly equipping themselves for the responsibility of dealing with personnel and the methods of hygienic food handling.

In order to assist in the solution of this particular problem and to encourage employers to avail themselves of study facilities for themselves and their staffs, certificated courses are now held by this department in co-operation with the Royal Society of Health. The subjects cover both the catering and the retail distributive trades. It is gratifying to record the increasing acceptance of these facilities, and to acknowledge the practical interest of many employers who encourage their staffs to attend and in a number of cases pay their fees. **Staff Training**

The total number of 1,558 visits were made and 567 infringements reported. **Inspections**

There are some 1,884 establishments from which ice cream is sold by retail and 48 manufacturing premises. New applications for registration during the year totalled 34 vendors and two manufacturers, and there were 34 applications in respect of transfers of ownership of businesses. **Ice Cream retail trade**

There appeared to be a significant increase in the distribution and sale of pre-wrapped confectionery by the larger bakeries during the year and this practice has also been adopted by many small confectioners. This method of presentation and distribution must effectually minimise the risk of contamination on the sales side, but greater care must be taken during production as the cakes are usually enclosed in cellophane which will act as a primitive incubator if the goods are kept in warm shops. Confectionery which had been contaminated before wrapping would provide ideal conditions for the growth of micro-organisms under these circumstances. **Bakehouses. Wrapped baked goods Care during production**

The effect of wrapping sliced bread and lines like fruit tarts before proper cooling, has been indicated by a number of baked articles which have been brought to the department showing evidence of mould growth. In other cases mould formation has been due to keeping the food too long under unsatisfactory conditions in shops or the houses of customers. **Mould**

A complaint which is occasionally dealt with, concerns small dark deposits in the substance of loaves of bread. Investigation has revealed the fact that these are pieces of dough impregnated with vegetable oil and have only occurred in connection with bread baked by a highly mechanised process. Vegetable oil is used as a lubricant and it is possible for a piece of dough occasionally to pick up a small amount of oil impregnated dough when travelling along a conveyor belt. There is some evidence **Vegetable oil contamination in loaves**



to suggest that this could be avoided by re-designing the conveyor rollers and the attention of one or two prominent firms has been drawn to the advantages of this modification.

#### **Hygiene in bakehouses**

A substantial amount of baking in this city is now concentrated in a few large bakeries and the supervision of matters relating to hygiene in this type of food factory is invariably the responsibility of specialised personnel, who have been trained and attended one of the food hygiene courses, which are being held in the University School of Hygiene. The number of supervisors from within the bakery trade who have taken this opportunity of gaining a technical knowledge of the basic problems associated with the production and supply of clean and safe food, has indicated a genuine desire to maintain a sound standard of hygiene in the industry.

This is probably reflected in the fact that no proceedings were instituted during the year in respect of unsatisfactory conditions during the 405 visits to bakehouses; there were, however, 73 defects of a minor character, which were remedied following the sending of warning letters to the offenders.

#### **Preserved Meat premises**

#### **Registration**

Manufacturers of preserved meat and sausages and the premises where this work is carried out must be registered in accordance with the requirements of the Liverpool Corporation Act, 1936. As cooked meat and sausages have frequently been established as the offending food in outbreaks of food poisoning, registration is not granted unless the premises have been inspected and reported as being suitable for the purpose and that the food can be produced under hygienic conditions.

#### **Licensing Act, 1961**

This Act, which provides the City Council with stronger power of objection if it appears that the premises are unsuitable from their character and condition, for use as a licensed premises, including licensed restaurants and licensed residential premises, also registered clubs, came into force in respect of certain licensed premises on the 1st November, 1961 and in respect of registered clubs on the 1st March, 1962.

#### **Club premises**

In accordance with the provision of the Act, club premises where intoxicating liquor is supplied by or on behalf of the club must be registered, or licensed. The registration certificate is granted by a Magistrates' Court and is in force for a period of twelve months, or on a second or subsequent renewal, for a period of ten years, or less, at the discretion of the Magistrate. The premises are required to comply with the requirements of the local

authority and insofar as the Health Department is concerned, this may be construed as being in a good sanitary condition, provided with suitable and sufficient sanitary accommodation and complying with the requirements of the Food Hygiene (General) Regulations, 1960 and the Public Health Act, 1936.

During the year a total of 283 premises were inspected following applications being received for club registration certificates. In accordance with the requirements of this enactment, specifications of works were forwarded to the applicants and the necessary works were carried out in 243 clubs, at an estimated cost of £75,000. Thirteen clubs withdrew their applications, four applications were subsequently refused by the Magistrate when the applicants failed to appear before the Court and the remaining 23 clubs had not completed the works required during the year. **Club Registration Certificates**

In addition to the club registration certificates, 49 premises were visited and examined in connection with applications for a Justices' Licence to hold an excise licence for the sale of intoxicating liquor. These included clubs, restaurants and off-licence premises and in 41 cases approval was given after the specification of works had been satisfactorily completed. Two applications were withdrawn and the remaining six applicants had not completed the necessary improvements in accordance with the specifications, at the end of December. **Justices' Licences**

As a direct result of the requirements of the Health Department considerable improvements have been carried out in the various clubs throughout the city by the provision of additional sanitary accommodation, hot water supplies, new sinks and wash-hand basins, also new and improved storage facilities for glasses and beer stillage. Club members have also benefited by the improvements to the club premises, in addition to re-decoration and new furniture being provided and the management committees have also been required to improve the ventilation by the installation of electric fans and room heaters. **Improvements**

Changes made by the Act so far as they relate to public houses do not come under the Health Department, but the powers provided by the Food Hygiene (General) Regulations, 1960, are sufficient to control the hygienic state of such premises and to secure the service of intoxicating liquor and food which is not exposed to risk of contamination. **Public Houses**



### Cleanliness and Decoration

The local brewery companies appear to realise the fact that a good standard of cleanliness is an important feature in licensed premises not only as a hygienic requirement, but also as a business asset and observations have shown that licensees as a whole, are anxious to maintain bright, attractive and clean premises for these reasons. In the more modern suburban type of public house this can be achieved by reasonable care and effort, but in the older public houses located near the docks which are patronised by workers during the daytime, the staff find day-to-day cleanliness quite a problem.

Cleanliness is encouraged when internal structural surfaces are decorated regularly and not permitted to become discoloured and dilapidated. Dry cleaning methods such as brushing and wiping of walls and ceiling are carried out by many licensees and this does keep a room reasonably smart until redecoration is due. In this area most of the public houses are decorated inside about once in three years, although this schedule is sometimes disorganised when certain rooms become fouled with tobacco smoke or are located in positions where street dust and traffic fumes enter the premises.

### Disposal of waste beer— Overspill beer

A feature of the trade which has always attracted the interest of this department are the methods of dealing with overspill beer and waste beer. Overspill or overflow beer is liquor that has not been served or touched by customers and in general is beer which overflows when a glass is being charged by a barman when operating the pump and sometimes when a pump is being primed. The overspill is usually collected in a container under the tap or a drip tray which drains into covered enamel receptacles from which it is returned into a cask of mild beer. In some cases the overspill is returned automatically into the pipe line and mixed with fresh beer being drawn up by the pump. Providing that the liquor is not contaminated in any way it is not reasonable to object to this procedure, although a theoretical case against this practice may be advanced on hygienic grounds.

### Waste beer

The danger of utilising overspill beer is that careless bartenders may throw waste beer from customers glasses and serving trays into the drip tray where it would mix with the overspill. Every effort is made by the local brewery companies to check this practice and one of the purposes of inspectors' evening visits to licensed premises is to see that waste beer is not resold in view of the fact that it has been exposed to contamination.

Experiments are being carried out with "keg beer" and "tanked beer". **Future trends in beer delivery**  
 In these cases the liquor is kept under pressure in containers from the brewery to the point where it enters the customer's glass, hence it is not possible to pour back overspill or waste beer into the bulk supply. It may well be that this method will eventually be adopted universally and risk of contamination will be eliminated.

The department has received no complaints of unsatisfactory cleansing of **Washing of drinking utensils**  
 beer and liquor glasses during the year and observation has shown that there has been a marked improvement in this respect. It is known that brewery supervisors have been impressing licensees with the hygienic importance of washing these utensils, but owing to the appreciable labour turnover and necessity of employing part-time barmen constant vigilance is essential.

1,633 visits were made to public houses during the year and appropriate notices issued in cases where infringements were observed.

The type and variety of vehicles used for the transport and sale of food **Food vehicles—Types of food vehicles**  
 is extremely wide and varied and ranges from the small handcart of the itinerant "barrow-boy" to the massive mechanically propelled vehicles used by large manufacturers and distributors. The latter which include specially designed vans incorporating refrigerating and ventilation equipment present no problems from a food hygiene point of view.

The greatest danger of contamination of food carried in vehicles lies in **Risk of food contamination**  
 the field of wholesale and retail distribution and although there has been a marked improvement in design and construction constant supervision is necessary to ensure that vanmen take precautions to see that the food they handle does not become contaminated in any way. As a general rule distributors and traders are anxious to show that they appreciate the need for a good standard of hygiene and do not hesitate to take appropriate action when any unsatisfactory condition is brought to their notice when distributing food. One prominent bread and confectionery firm has given written instructions to each vanman and salesman in their employ to take particular care to comply with the requirements of the Food Hygiene Regulations and a special warning has been issued to keep the van doors closed when the vehicles are in motion. An infringement of this instruction may lead to the dismissal of the employee.



**Delivery of  
bread and  
confectionery**

The conveyance of bread and confectionery exercises the concern of this department owing to the likelihood of this food being contaminated with dust and dirt unless precautions are taken to avoid this at all stages between the factory and the consumer. Special attention has been given by the inspectors to this aspect of food distribution and cautionary letters are invariably sent to firms on occasions when unsatisfactory conditions of this nature are observed.

**Transport of  
meat**

Carcase meat and offal from the abattoir and cold stores are generally delivered to wholesale buyers and retail shops by hauliers or the larger firms in specialised vans in which the meat is satisfactorily protected.

**Use of  
private cars**

There is, however, considerable room for improvement in the manner in which small quantities of meat and offal are conveyed in cars by some retailers and caterers. The general practice is to fit removable deep aluminium trays which is a satisfactory method, but it is when the boot of a car is used for this purpose that there is a risk of contamination of the meat by dust, dirt or grease and action is necessary. Thorough washing and cleansing of the compartment would be impracticable and in cases where private cars are the only means of conveyance or in cases of emergency special precautions must be observed in handling and wrapping.

## DISINFECTION AND DISINFESTATION

The disinfection and disinfestation services continue to function in much the same manner as in recent years, with a continued slight decline in the services required for disinfection following infectious disease both in the City and in the Port, but a corresponding slight increase in disinfestation treatment of verminous premises.

The slow but steady decline in the disinfection service is a positive proof of the general reduction in the numbers of cases of infectious disease which are occurring in the City. The section, however, is capable of coping with any sudden outbreak of infection should it occur at any time, thus providing a form of insurance against the further spread of infectious disease.

Although the figures produced show an increase in the use of the disinfestation service, this is no indication of an increase in the amount of vermin to be found either in dwelling houses or in other premises, but rather that the public is becoming more aware of the danger and discomfort which are caused by vermin infestation. The general standard which can be observed shows a sure but certain improvement in the desire to keep premises free from vermin.

The duties which are controlled by this section are enumerated below:—

1. Inspection of premises for verminous condition.
2. Disinfestation treatment of verminous premises.
3. Disinfestation treatment of verminous furniture, etc.
4. Disinfestation and disinfection stations.
5. Disinfection of infectious premises.

### 1. *Inspections for Verminous Condition*

The categories into which inspections may be divided are:—

(a) The majority of inspections of dwelling houses are made on behalf of the Housing Department and carried out with the intention of obtaining information regarding the verminous condition of furniture and effects belonging to families recommended for rehousing. These inspections are carried out on all housing estates irrespective of their location, inside or outside the City boundaries,



(b) Public interest in the cleanliness of dwelling houses is reflected in the growing number of requests received from owners or occupiers who suspect that premises are vermin infested. If, in fact, these premises are found to be verminous and disinfestation treatment is requested, the cost of such treatment is debited to the complainant.

Frequent requests for disinfestation treatment are received from Hospital Management Committees, factory canteen managers, and proprietors of food manufacturing plants.

The cost of such treatments are borne by the complainants.

## 2. *Disinfestation Treatment of Verminous Premises*

Following inspections, disinfestation treatment was carried out in the following cases:—

- (a) 659 dwelling houses at the request of the Housing Department.
  - (b) 697 dwelling houses treated at the request of owners or occupiers.
  - (c) 441 treatments of hospitals, staff canteens, factory premises, etc.;
- a total of 1,797 treatments

## 3. *Disinfestation Treatment of Verminous Furniture, etc.*

The disinfestation of dwelling houses includes the treatment of furniture bedding and personal effects. The method of treatment is for furniture, bedsteads, pictures, etc., to be treated on the premises but it is necessary for mattresses, bedding and soft furnishings to be removed to a disinfestation station for adequate treatment. The latter process is carried out with the minimum amount of inconvenience to the occupants of the premises. The furniture and effects of 875 families were treated in this manner during the year.

## *Welfare Cases*

On behalf of the welfare section of the Health Department, an increasing number of dwelling houses and apartment rooms are disinfested and cleared of accumulations of rubbish. These are premises from which the occupants have been removed to hospital or were physically unable to clean their accommodation adequately.

## 4. *Disinfestation and Disinfecting Stations*

The stations at Smithdown Road and Charters Street were able to cope

with all the infectious and verminous articles collected from premises and ships in the area controlled by the Local Authority and the Port Health Authority.

A small income accrues to the department from the precautionary disinfection of articles which are intended for export and for which the importing country demands a certificate of adequate disinfection.

In this connection the stations dealt with the following items during the year:—

- 5,742 verminous articles disinfested ;
- 7,180 infectious articles disinfected ;
- 88 infectious library books ;
- 3,530 articles disinfected as a precautionary chargeable measure ;
- 1,566 tons of miscellaneous goods, the outer wrappers of which are disinfected as a precautionary chargeable measure.

#### 5. *Infectious Premises and Contents*

The disinfection of premises where infectious disease has occurred is still a primary function of the section and it is the duty of the staff to remove infectious articles to a disinfecting station and to carry out the required terminal disinfection of premises. During the year 876 infectious premises were dealt with in the prescribed manner.

When requests are made for precautionary treatment of premises, where a non-infectious disease has occurred, the department is willing to co-operate, but is obliged to levy a charge for such service.



## TRANSPORT AND ANCILLIARY SERVICE SECTION

This section of the department, which deals with general transport of stores, merchandise, equipment, etc., is also responsible for a number of other services which, to a greater or lesser degree, are allied to general transport on behalf of the various sections of the Health Department.

### 1. *Meals on Wheels.*

Meals are provided under this scheme to the homes of persons who are in need of the undoubted benefits to be derived from the provision of a hot cooked meal. The service is maintained by vans from this section, each van being staffed by a departmental driver and a volunteer assistant from the Women's Voluntary Service. During the year, 63,767 visits were made and a corresponding number of meals supplied, seven vans being used for this purpose.

### 2. *Home Nursing Equipment.*

The purpose of this service is to provide equipment which may be necessary for the efficient nursing of persons who are ill at home. The demands for this equipment are growing year by year and during 1962, 8,056 visits were made for the purpose of issuing or collecting the various items. The administration of this service is performed by staff of the maternity and child welfare section, but the practical work, involving the storage, distribution, collection and maintenance of equipment, is performed by staff of this section.

### 3. *Incontinent Laundry.*

The laundry service for incontinent patients is becoming more widely known and as a result the demands are growing considerably. It has now become one of the major duties of this section to keep this service running smoothly and to do so it has become necessary to second additional members of the staff to this service. The Medical Officer of Health is very grateful for the co-operation and good service given by the Baths and Public Laundries Department in assuring the efficiency of this new service.

During the year demands varied between 50 and 80 visits per day and the total number of calls was 16,900.

#### 4. *Food and General Store.*

This is situated at Gascoyne Street Depot, and continues to function in an expanding and satisfactory manner. Food, cleaning materials, chandlery, medical and general stores are supplied to 198 establishments, principally those under the control of the Health Department, Children's Department, and one police establishment

The value of goods supplied during the year was £27,205, and the establishments supplied were:—

44	Maternity and Child Welfare Section
18	Welfare Section
60	Domiciliary Midwives
5	Mental Health Section
40	Education and School Medical Departments
9	Children's Department
14	Other Establishments
8	Home Nursing Establishments

Staff employed on stores duties are one storekeeper and three assistants.

#### 5. *Burials and Cremations.*

The department maintains an effective service for the burial or cremation of persons who die in the City, where it appears that no suitable funeral arrangements are being made by relatives or friends. Section 50 of the National Assistance Act, 1948, places the responsibility for this duty on the Local Authority and the service is functioning under the control of this section of the Health Department. During the year burials or cremations were arranged in cases involving 153 adults and children.

Although cremation is the policy advocated by the department where religious or other convictions permit, the wishes of relatives or friends are strictly respected and at no time is pressure brought to bear to enforce this policy.

#### 6. *City Mortuary.*

The control and staffing of the City Mortuary is the responsibility of the section. Two experienced full-time attendants are employed on a rota of early and late duties and are on call should an emergency arise outside their normal working hours. The mortuary is used for the reception from the City or from the river of bodies of persons who have died as a result of accident, violence, etc. During the year 636 bodies were received and 566 post-mortems were held.



Close liaison is maintained with the City Coroner's Officer for the effective functioning of this service.

#### 7. *Poliomyelitis Immunisation.*

This section was heavily involved in the third stage of the poliomyelitis immunisation campaign. The principal duties were (a) the equipping of centres, (b) the provision of supplies—vaccine, and all other items necessary for the smooth running of the campaign. All members of this staff were involved to some degree in the maintenance of this vital service.

#### 8. *Miscellaneous.*

- (a) The collection and removal of furniture and equipment to and from aged persons hostels.
- (b) Collection, repair and delivery of day nursery equipment and furniture, and repairs to furniture, etc., at the office building, Hatton Garden.
- (c) Transport of equipment on behalf of the Mental Health Service.
- (d) Various transport duties on behalf of the Children's Department.
- (e) The movable property of persons admitted to hospital or to accommodation provided under Part III of the National Assistance Act, 1948, is conveyed, where necessary, to and from store.
- (f) The residents in aged persons' hostels are provided with facilities for obtaining books from public libraries. The transport required for this service is provided by this section.
- (g) The transport of port health personnel continues in a satisfactory manner by means of a vehicle from this section.
- (h) A variety of other transport duties necessary for establishments under the control of the Health Department.
- (i) Maintenance of gardens at day nurseries and clinics.
- (j) Drying of water damaged bedding, etc.

#### 9. *Liverpool Show.*

As in previous years the Health Department provided an exhibit at the Liverpool Show. The Health Education aspect of the exhibit attracted considerable attention from the visitors to the show.

#### 10. *Emergency Service.*

During the severe cold weather in the early part of the year, numerous requests were received to give assistance in the drying out of bedding, carpets, etc., which had become saturated with water due to burst pipes. Owing to the limited facilities available for this purpose, the department was obliged to restrict its activities in this direction to assisting elderly or sick persons.

The drying out process was performed either at the department's disinfecting stations or at the Baths Department wash houses. Again the Medical Officer of Health wishes to express its gratitude to the Baths Manager for the co-operation given both by him and members of his staff during this difficult period.

#### *Staff.*

The wide variety of duties listed above is performed by a staff of 51 consisting of:—

##### *Administrative*

1 Chief Inspector  
4 Inspectors  
1 Copy Typist  
3 Foremen  
1 Storekeeper

##### *Operational*

2 Mortuary Attendants  
1 Mechanic  
1 Joiner  
2 Boiler Attendants  
18 Drivers  
17 Disinfestors, Disinfectors, etc.

#### *Vehicles.*

Nineteen motor vehicles are engaged in the work of the section and are completely maintained by the staff of Gascoyne Street Depot. During the year these vehicles covered 197,622 miles and consumed 12,124 gallons of petrol.



## CIVIL DEFENCE

With regard to sections of the Health Department dealing with Civil Defence, the following are the details in respect of each section.

Forty Civil Defence Circulars were issued by the Home Office Civil Defence Department dealing mainly with training and administrative matters.

### Shelter Welfare Section

No training was undertaken during the year by the Shelter Welfare section as numbers were not large enough to warrant it.

### Welfare Section

In July, 1962, after a reappraisal of the functions and structure of the Civil Defence Corps, the Government decided that there was the need for highly trained volunteers of good quality who would be able to provide leadership in the tasks which would fall to the Civil Defence organisation during war.

To ensure the services of volunteers of adequate quality, precise obligations must now be fulfilled in order to remain active members of the Corps. Recognition of the fulfilment of the obligations will be made by the payment of an annual bounty.

When it was implemented in October the reorganisation of the Civil Defence Corps was not well received by members of the Welfare Section. However, now that the transitional period is over and volunteers have got a clearer picture of the future organisation and its capabilities, a considerable amount of enthusiasm is now evident and will undoubtedly increase when the first bounty payments are made to some twenty volunteers later this year.

The effect of the reorganisation on the structure of the Welfare Section has been to do away with the two separate headings, "Emergency Feeding" and "Evacuation and Care of the Homeless", as such, and to group all the functions under one main title, "The Welfare Section". This means that all volunteers now receive the same training which is in Dispersal and Care of the Homeless and Emergency Feeding. A greater degree of importance has now been attached to first aid which is included in every Standard Training Course, while Home Nursing has become part of the Class A Advance Training Syllabus.

Course No. 38 (Revision) which has been running on a Monday evening at Civil Defence Headquarters has been well supported and on its completion in April, 1963, will be followed by two more courses:—

1. The Standard Training Syllabus for volunteers who have elected to join Class A.
2. The Advance Training Syllabus for volunteers who are members of Class A.

Seven Gold Stars were presented at Civil Defence Headquarters on 18th September; the future of the section holds great promise and all members are looking forward to a very active year.

During the year nine training courses were arranged and members responded very well to training covering all aspects of civil defence. In addition the divisional nights continued at both Civil Defence Headquarters and Area headquarters. **Ambulance and First Aid Section**

The introduction of Ministry of Health Circular 18/62, which called for the re-organisation of the Civil Defence Corps was implemented within the ambulance and first aid section and two standard training examinations were held in which 33 members sat and thirteen were successful. Training of the voluntary aid societies in civil defence also commenced and two classes were arranged in which 28 St. John volunteers attended.

The average monthly attendance throughout the year was 69. Four volunteers attended a potential officer's course and one permanent member of the normal service attended a requalifying instructor's course at the Home Office training school, Falfield, Gloucester, through the year.

Eleven members of the section received Gold Stars at Civil Defence Headquarters on 11th September, 1962.

Exercises were held at both Garston Old Road and Aintree which tested the efficiency of the ambulance and wardens sections in operational duties.

Twenty-three volunteers assisted the Regional Hospital Board in the semi-finals and final of their competition by acting as stretcher bearers.

Two important handbooks were issued during the year:

No. 3 General Information for all Sections.

No. 7 Intended as Aide Memoire in regard to the functions of the section.



## CREMATION

The Medical Officer of Health continued to act as medical referee to the Liverpool Crematorium. The Deputy Medical Officer of Health and the Principal Medical Officer (Mental Health) acted as deputy medical referees. The documents, which are statutory, are scrutinised at the central offices of the Health Department before the medical referee gives authority to cremate.

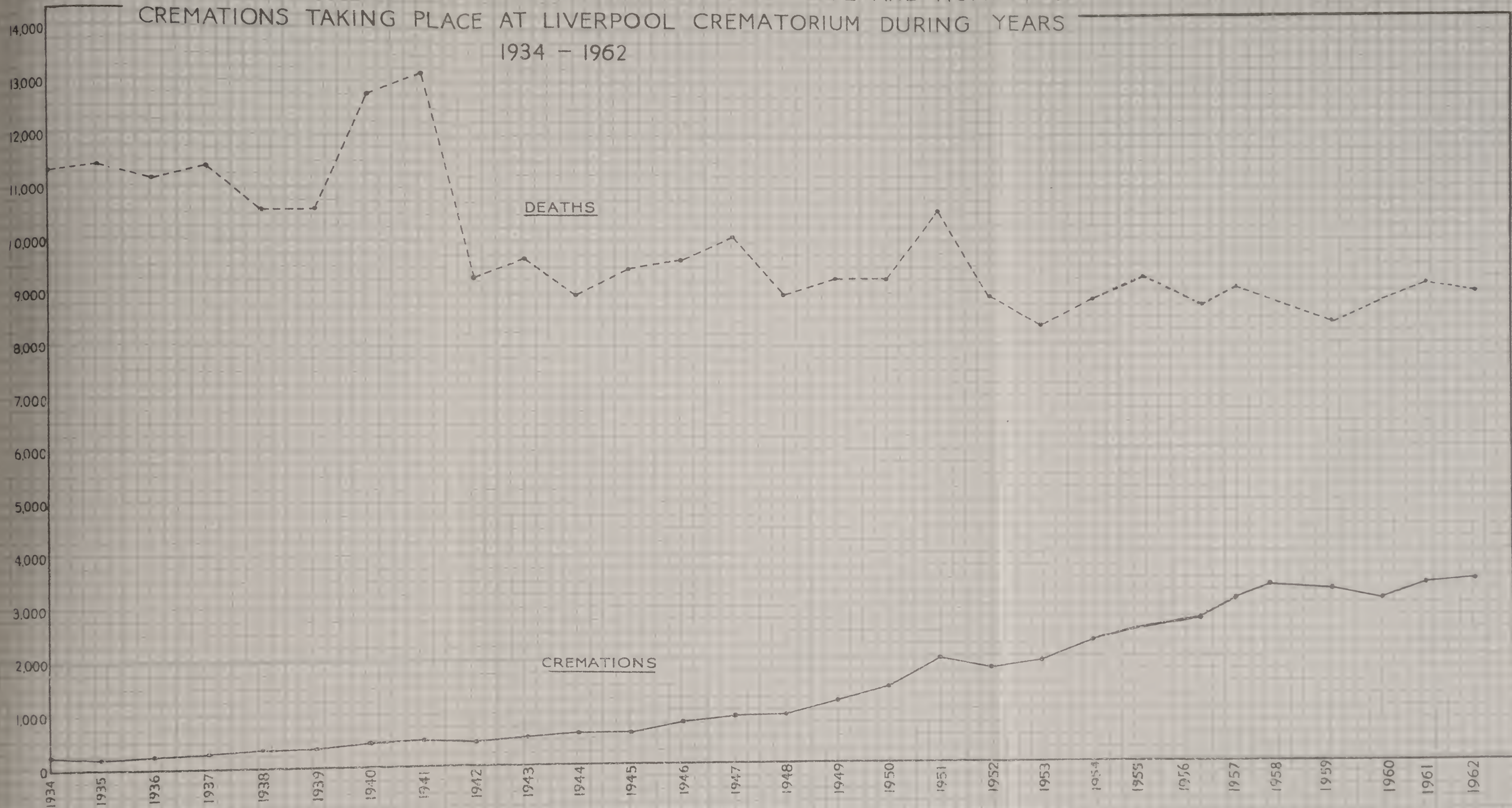
The number of cremations carried out during the year at the Liverpool Crematorium was 3,447, which is an increase of 37 (1.09 per cent) over the number undertaken during 1961. These figures illustrate the ever growing preference with the general public for this means of disposal rather than earth burial, and although the increase in numbers is not as great as in previous years, this can be accounted for by the fact that three new crematoria were opened in adjacent areas during the year, namely, at St. Helens and Thornton in Lancashire, and in the Isle of Man, and these are areas from which quite a number of cremations were previously carried out at Liverpool. The total figure for all cremations for the year represents approximately the equivalent of one third of the total deaths taking place in Liverpool.

One interesting case was brought to light during the year, that of a person who proceeded to Italy on holiday and died there. The relatives were desirous of cremation at Liverpool and all the necessary documents were received printed in Italian. However, it so happened that the medical attendant in Liverpool had seen the deceased only a week before he left this country, and was satisfied as to the cause of death and, therefore, there was no cause for a post mortem to be held. Special arrangements had to be made for the casket containing the body to be opened in order that the family doctor and the second doctor could see the body and be in a position to answer satisfactorily the questions on the medical forms which have to be completed before the cremation can be carried out.

Quite a number of written requests for cremation to take place on death were received from members of the public and these are filed for future reference in order that the wishes of the persons concerned may be met.



GRAPH SHOWING TOTAL DEATHS OCCURRING IN LIVERPOOL AND NUMBER OF  
CREMATIONS TAKING PLACE AT LIVERPOOL CREMATORIUM DURING YEARS  
1934 - 1962







## WATER SUPPLY

The water supply in the area during 1962 was satisfactory both in quality and quantity. No unusual form of contamination necessitated any special action.

During the year 1962 bacteriological examinations were made on 2,822 samples of water from the aqueducts, wells, storage reservoirs, trunk mains and the distribution system. Of the 2,822 samples 542 were taken within the City from the two wells and from sampling points on mains other than the trunk mains. Of the 542, 100 per cent were free from B.Coli and 80.4 per cent were free from coliform organisms. Also of the 2,822 samples 1,009 were taken from the trunk mains which serve the City and other parts of the area of supply. Of the 1,009, 99.3 per cent were free from B.Coli. and 88.5 per cent were free from coliform organisms.

Also, 67 chemical analyses were made and the results were satisfactory. For plumbo-solvency 280 analyses were made. The average amount of lead absorbed in those samples of water that had passed through test lengths of lead piping was 0.08 part per million. The supplies from both Rivington and Lake Vyrnwy were treated with hydrated lime in order to raise the pH value.

The number of dwellinghouses, flats and shops with domestic living accommodation supplied from the public water mains in Liverpool was 206,989. None was supplied by a stand pipe. The population of the City as estimated by the Registrar General for 30th June, 1962, was 745,230.





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# STATISTICAL APPENDIX.

TABLE 1  
BIRTH STATISTICS

	LIVE BIRTHS			STILLBIRTHS		
	Males	Females	Total	Males	Females	Total
Legitimate ...	7,977	7,482	15,459	163	151	314
Illegitimate ...	558	462	1,020	11	8	19
	8,535	7,944	16,479	174	159	333

Year	Births	Birth Rate	Illegitimate Births	% of Births
1938	16,175	18.7	771	4.8
1942	13,729	20.5	871	6.3
1943	14,432	21.8	1,030	7.1
1944	15,412	23.1	1,274	8.3
1945	14,784	21.7	1,582	10.7
1946	18,528	25.2	1,351	7.3
1947	19,904	26.4	1,151	5.8
1948	17,695	22.3	1,009	5.7
1949	16,551	20.7	943	5.7
1950	16,110	20.1	968	6.0
1951	15,593	19.9	859	5.5
1952	15,839	20.0	876	5.5
1953	16,022	20.3	873	5.4
1954	15,742	20.5	847	5.4
1955	15,268	19.6	785	5.1
1956	15,944	20.6	801	5.0
1957	16,044	20.9	854	5.3
1958	15,662	20.5	799	5.1
1959	15,615	20.6	815	5.2
1960	15,961	21.1	868	5.4
1961	16,492	22.1	946	5.7
1962	16,479	22.1	1,020	6.2



Year	Registered Live Births	Registered Stillbirths	Total Births	Stillbirths per 1,000 Live and Stillbirths
1935	17,347	749	18,096	41.4
1936	17,403	708	18,111	39.1
1937	16,728	618	17,346	35.6
1938	16,175	639	16,814	38.0
1939	15,614	631	16,245	38.9
1940	15,016	519	15,535	33.4
1941	13,291	508	13,799	36.8
1942	13,729	552	14,281	38.6
1943	14,432	485	14,917	32.5
1944	15,412	492	15,904	30.9
1945	14,784	431	15,215	28.3
1946	18,528	539	19,067	28.3
1947	19,904	514	20,418	25.2
1948	17,695	479	18,174	26.3
1949	16,551	358	16,909	21.2
1950	16,110	375	16,485	22.7
1951	15,593	396	15,989	24.8
1952	15,839	400	16,239	24.6
1953	16,022	394	16,416	24.0
1954	15,742	400	16,142	24.8
1955	15,268	408	15,676	26.0
1956	15,944	394	16,338	24.1
1957	16,044	409	16,453	24.9
1958	15,662	413	16,075	25.7
1959	15,615	375	15,990	23.4
1960	15,961	377	16,338	23.1
1961	16,492	380	16,872	22.5
1962	16,479	333	16,812	19.8

TABLE 2

Analysis of causes of Infant Mortality in successive quinquennia 1896-1960,  
and the years 1961 and 1962.

(A.)—Recorded Deaths.

Years.	1 Total Births.	2 Total Deaths Under 1 Year of Age.	3 General Diseases (excluding Tubercu- losis).	4 Tubercular Diseases.	5 Nervous Diseases	6 Respira- tory Diseases	7 Digestive Diseases (including Diarrhoea.)	8 Malforma- tions Premature Birth, Maras- mus &c.	9 External Causes.
896/1900	111,700	21,160	1,508	698	2,476	3,575	6,376	5,698	819
901/1905	118,801	20,353	1,546	644	2,516	3,484	5,187	5,732	565
906/1910	118,313	17,739	1,613	465	2,052	3,146	3,902	5,520	539
911/1915	111,872	15,458	1,309	345	1,432	2,916	3,635	4,953	426
916/1920	99,451	11,510	1,116	202	1,083	2,821	1,872	4,107	179
921/1925	104,217	10,497	1,066	200	573	2,776	1,786	3,764	120
926/1930	95,701	9,002	978	109	401	2,553	1,670	2,981	81
931/1935	88,644	7,904	902	82	368	2,050	1,184	3,125	67
936/1940	80,936	6,226	573	74	519	1,457	698	2,691	84
941/1945	71,648	5,512	341	71	403	1,704	548	2,193	131
946/1950	88,788	5,034	311	47	213	1,109	963	2,226	111
951/1955	78,464	2,626	83	10	28	480	132	1,792	63
956/1960	79,226	2,149	31	—	24	384	82	1,576	30
1961	16,492	467	4	1	5	78	23	344	8
1962	16,479	461	2	—	4	94	19	321	16



TABLE 2—*continued*.

Analysis of causes of Infant Mortality in successive quinquennia 1896-1960,  
and the years 1961 and 1962.

(B.)—Death Rates per 1,000 Births.

Years	1 Total Births	2 Total Deaths Under 1 Year of Age	3 General Diseases (excluding Tubercu- losis)	4 Tubercular Diseases	5 Nervous Diseases	6 Respira- tory Diseases	7 Digestive Diseases (including Diarrhoea)	8 Malforma- tions Premature Birth, Maras- mus &c.	9 External Causes
1896/1900	*33.4	189	12.7	6.2	22.1	32.0	57.1	51.0	7.3
1901/1905	33.4	172	13.0	5.5	21.2	29.3	43.7	48.1	4.7
1906/1910	32.2	149	13.6	3.9	17.4	26.6	33.0	46.7	4.6
1911/1915	29.3	137	11.6	3.1	12.8	26.1	32.5	43.1	3.8
1916/1920	24.9	116	11.1	2.0	10.9	28.4	18.8	42.0	1.8
1921/1925	25.1	100	10.2	1.9	5.5	26.6	17.1	36.1	1.2
1926/1930	22.1	94	10.2	1.1	4.2	26.7	17.4	31.1	0.8
1931/1935	20.5	89	10.1	0.9	4.2	23.1	13.4	35.3	0.8
1936/1940	19.4	77	7.0	0.9	6.4	17.9	8.8	32.9	1.0
1941/1945	21.3	78	4.8	1.0	5.6	24.1	7.7	30.7	1.8
1946/1950	22.9	56	3.4	0.5	2.3	12.3	10.5	25.1	1.2
1951/1955	20.1	33	1.0	0.1	0.3	6.1	1.7	22.8	0.8
1956/1960	20.7	27	0.4	—	0.3	4.9	1.1	19.9	0.4
1961	22.1	28	0.2	0.06	0.3	4.7	1.4	20.9	0.5
1962	22.1	28	0.1	—	0.2	5.7	1.2	19.5	1.0

\*In column 1 the rates indicate the number of births per 1,000 of the population.

TABLE 3

## ANALYSIS OF CAUSES OF MORTALITY.

Deaths from certain Groups of Diseases in each decade from 1871 to 1960, and during the years 1961 and 1962

Years	(a) Infective diseases (less Diarrhoea and Influenza)	(b) Tubercular diseases	(c) Respiratory diseases (including Influenza)	(d) Digestive diseases (including Diarrhoea)	Total Deaths from (a), (b), (c) & (d)	(e) Cancer	Total Deaths from all causes
1871-1880	27,205	19,869	29,763	14,747	91,584	2,015	147,005
1881-1890	19,748	17,870	32,507	13,186	86,311	2,820	146,195
1891-1900	13,515	16,714	35,819	18,491	84,539	4,223	145,522
1901-1910	13,967	16,054	32,995	18,163	81,179	6,480	150,962
1911-1920	10,417	14,946	36,480	12,282	74,125	7,603	137,223
1921-1930	7,831	12,664	29,447	8,184	58,126	9,852	117,756
1931-1940	6,473	9,413	18,196	5,987	40,069	12,619	115,632
1941-1950	2,645	6,987	15,728	4,328	29,723	13,265	98,347
1951-1960	621	2,063	15,315	2,570	20,569	15,986	90,642
1961	25	86	1,888	229	2,228	1,708	9,262
1962	29	81	1,774	205	2,089	1,719	9,162



TABLE 3—*continued*.  
Deaths expressed as a percentage of total deaths from all causes (Proportionate Mortality).

Years	(a) Infective diseases (less Diarrhoea and Influenza)	(b) Tubercular diseases	(c) Respiratory diseases (including Influenza)	(d) Digestive diseases (including Diarrhoea)	Total Deaths from (a), (b), (c) & (d)	(e) Cancer	Total Deaths from all causes
1871-1880	19.2	13.5	20.2	10.0	62.9	1.4	100.0
1881-1890	14.1	12.7	23.2	9.4	59.4	2.0	100.0
1891-1900	9.3	10.8	24.6	12.7	57.4	2.9	100.0
1901-1910	8.6	10.6	21.8	12.0	53.0	4.3	100.0
1911-1920	7.9	10.9	27.3	8.9	55.0	5.5	100.0
1921-1930	6.6	10.7	25.0	6.9	49.4	8.4	100.0
1931-1940	5.6	8.1	15.7	5.2	34.7	10.9	100.0
1941-1950	2.6	7.1	15.9	4.4	30.1	13.7	100.0
1951-1960	0.7	2.2	16.8	2.8	22.5	17.7	100.0
1961	0.3	0.9	20.4	2.5	24.1	18.4	100.0
1962	0.3	0.9	19.4	2.2	22.8	18.8	100.0

TABLE 4  
DEATHS FROM CANCER

Organs Affected					Number of deaths
Buc. cavity and pharynx	...	...	...		30
Oesophagus, stomach, intestines and rectum					555
Larynx, trachea, bronchus and lungs			...		484
Cervix and uterus	...	...	...	...	61
Breast	...	...	...	...	134
All other sites	...	...	...	...	383
Leukaemia and aleukaemia	...	...	...		36
Lymphosarcoma	...	...	...	...	36
Total	...	...	...	...	1,719



TABLE 5  
MATERNAL MORTALITY.

Year.	BIRTHS REGISTERED.			MATERNAL MORTALITY.	
	Live Births.	Stillbirths.	Total Births.	Deaths.	Rate per 1,000 Total Births.
1930 ... ..	18,881	774	19,655	75	3.81
1931 ... ..	18,626	722	19,348	55	2.84
1932 ... ..	18,149	827	18,976	51	2.69
1933 ... ..	16,929	680	17,609	60	3.41
1934 ... ..	17,593	685	18,278	51	2.79
1935 ... ..	17,347	749	18,096	59	3.26
1936 ... ..	17,403	708	18,111	64	3.52
1937 ... ..	16,728	618	17,346	40	2.31
1938 ... ..	16,175	639	16,814	33	1.96
1939 ... ..	15,614	631	16,245	29	1.86
1940 ... ..	15,016	519	15,535	31	2.01
1941 ... ..	13,291	508	13,799	32	2.42
1942 ... ..	13,729	552	14,281	34	2.38
1943 ... ..	14,432	485	14,917	34	2.27
1944 ... ..	15,412	492	15,904	31	1.95
1945 ... ..	14,784	431	15,215	23	1.51
1946 ... ..	18,528	539	19,067	19	0.99
1947 ... ..	19,904	514	20,418	17	0.83
1948 ... ..	17,695	479	18,174	14	0.77
1949 ... ..	16,551	358	16,909	9	0.53
1950 ... ..	16,110	375	16,485	7	0.42
1951 ... ..	15,593	396	15,989	10	0.62
1952 ... ..	15,839	400	16,289	7	0.43
1953 ... ..	16,022	394	16,416	5	0.30
1954 ... ..	15,742	400	16,142	8	0.49
1955 ... ..	15,268	408	15,676	9	0.57
1956 ... ..	15,944	394	16,338	7	0.43
1957 ... ..	16,044	409	16,453	7	0.42
1958 ... ..	15,662	413	16,075	4	0.25
1959 ... ..	15,615	375	15,990	5	0.31
1960 ... ..	15,961	377	16,338	5	0.31
1961 ... ..	16,492	380	16,872	2	0.12
1962 ... ..	16,479	333	16,812	5	0.30

TABLE 6  
MIDWIFERY SERVICE

Requests for Visits to assess Home Conditions for Confinements.

Total Requests ...	...	...	...	...	1,428
No contact ...	...	...	...	...	57
Home confinement booked ...	...	...	...	...	479
Hospital confinement booked ...	...	...	...	...	892
No. of visits paid by Part-time Midwives ...	...	...	...	...	904
No. of visits paid by Full-time Midwives ...	...	...	...	...	2,045

TABLE 7  
ANALGESIA

	Year	Doctor present at delivery	Doctor not present at delivery	Total
Liverpool Maternity Hospital District Midwives				
Gas/Air ...	1960	50	1,112	1,162
	1961	60	913	973
	1962	67	930	997
Trilene...	1962	0	5	5
Pethidine or Pethilorfan ...	1960	32	720	752
	1961	44	665	709
	1962	54	703	757
Municipal Midwives				
Gas/Air ...	1960	259	3,060	3,319
	1961	260	3,045	3,305
	1962	295	2,756	3,051
Trilene...	1962	27	79	106
Pethidine or Pethilorfan ...	1960	230	2,480	2,710
	1961	227	2,395	2,622
	1962	257	2,255	2,512



TABLE 8

### Weights of Premature Babies cared for by Premature Baby Midwives

	Babies born at home and cared for by Prem. Baby Midwife	Babies born at home and transferred to hospital	Babies born in hospital and discharged to care of premature Baby Midwife
Less than 3 lb. 4 oz. ...	—	—	—
3 lb. 5 oz. to 4 lb. 6 oz. ...	2	1	5
4 lb. 7 oz. to 4 lb. 15 oz.	18	2	118
5 lb. 0 oz. to 5 lb. 8 oz. ...	39	2	337
5 lb. 9 oz. and over ...	4	—	134
TOTALS ... ..	63	5	594
Sets of Twins ... ..	5	1	43
Sets of Triplets ... ..	—	—	2

TABLE 9

## MIDWIFERY SERVICE

## Hospital Discharges—1962

[illegible]

TABLE 10

## Puerperal Pyrexias Notified in 1962

Occurring in Hospitals	...	...	...	...	...	...	472
Occurring in Nursing Homes	...	...	...	...	...	...	2
Occurring at Home	...	...	...	...	...	...	15
Total							<hr/> 489 <hr/>

Causes distributed as follows:—

Urinary infections	...	...	...	...	...	...	123
Nephritis	...	...	...	...	...	...	3
Uterine infections	...	...	...	...	...	...	42
Genital tract infection	...	...	...	...	...	...	41
Perineal infection	...	...	...	...	...	...	5
Peritonitis	...	...	...	...	...	...	2
Retained products	...	...	...	...	...	...	5
Premature rupture of membranes	...	...	...	...	...	...	1
Incomplete abortions	...	...	...	...	...	...	2
Port operative Caesarian Section	...	...	...	...	...	...	11
Wound infection Caesarian Section	...	...	...	...	...	...	11
Pneumonia	...	...	...	...	...	...	15
Bronchitis	...	...	...	...	...	...	26
Influenza	...	...	...	...	...	...	11
Upper respiratory tract infection	...	...	...	...	...	...	41
Throat infection	...	...	...	...	...	...	5
Parametritis	...	...	...	...	...	...	1
Pyrexia unknown origin	...	...	...	...	...	...	117
Haemolytic streptococcus	...	...	...	...	...	...	1
Breast infection	...	...	...	...	...	...	18
Thrombophlebitis	...	...	...	...	...	...	2
Pulmonary embolism	...	...	...	...	...	...	1
Diarrhoea	...	...	...	...	...	...	1
Haematoma of rectus sheath	...	...	...	...	...	...	1
Haematoma of Ischio-rectal fossa	...	...	...	...	...	...	1
Oral monilia	...	...	...	...	...	...	1
Reaction to iron injection	...	...	...	...	...	...	1
Total							<hr/> 489 <hr/>



TABLE 11

## Reasons for Requests from Domiciliary Midwives for Medical Aid

Mothers				Babies			
Ruptured perineum	...	...	445	Discharge from eyes	...	...	86
Ante partum haemorrhage	...	...	70	Asphyxia	...	...	14
Post partum haemorrhage	...	...	46	Cyanosis	...	...	13
Premature labour	...	...	40	Grunting respirations	...	...	2
Foetal distress	...	...	66	Poor general condition	...	...	3
Prolonged labour	...	...	105	Convulsions and twitchings	...	...	4
Malpresentation	...	...	58	Prematurity	...	...	11
Retained placenta	...	...	45	Atelectasis	...	...	2
Premature rupture of membranes	...	...	36	Septic infection and spots	...	...	24
Post maturity	...	...	4	Congenital abnormalities	...	...	23
Abortions	...	...	21	Mastitis	...	...	5
Pre-eclamtic toxæmia	...	...	29	Vomiting and diarrhoea	...	...	16
Pyrexia	...	...	51	Blood stained stools	...	...	3
Obstetric shock	...	...	3	Snuffles	...	...	21
Uterine infection	...	...	5	Cough	...	...	8
Subinvolution	...	...	2	Monilia infections	...	...	2
Anæmia	...	...	18	Oedema of extremities	...	...	2
Intra-uterine death	...	...	2	Oedema of scrotum	...	...	1
Urinary infection	...	...	19	Jaundice	...	...	2
Mastitis	...	...	15	Stillbirths	...	...	2
Thrombosis and Varicosis	...	...	17	Head injury	...	...	1
Mental instability	...	...	1	Cephalhaemotoma	...	...	1
Vomiting	...	...	8	Not passed meconium	...	...	1
Abdominal pain	...	...	5				
Domestic reasons	...	...	4				
Multiple pregnancy	...	...	4				
Throat infection	...	...	2				
Aches and pains	...	...	4				
Diarrhoea and vomiting	...	...	1				
Haemorrhoids	...	...	2				
Vulval hæmotoma	...	...	2				
Extra sedation	...	...	2				
Hydramnios	...	...	2				
Headache	...	...	2				
Circulatory disturbance	...	...	1				
No antenatal care and in labour	...	...	1				
Blurred vision	...	...	1				
Suppression of lactation	...	...	7				
Depression	...	...	1				
B.B.A....	...	...	1				
Anæmia	...	...	3				
Syncope	...	...	1				
Total	...	...	1,152	Total	...	...	247
Mothers	...	...	1,152	Doctor booked	...	...	1,248
Babies	...	...	247	Doctor not booked	...	...	151
Total	...	...	1,399	Total	...	...	1,399

TABLE 12

## PATIENTS TRANSFERRED TO HOSPITAL 1962

Mothers				Babies			
Pre-eclamptic toxæmia	...	...	113	Prematurity	...	...	13
Malpresentation	...	...	122	Cyanosis	...	...	1
Premature rupture of membranes			37	Icterus	...	...	2
Premature labour	...	...	37	Domestic reasons	...	...	2
Ante partum hæmorrhage	...		75	Stillbirth	...	...	1
Post maturity	...	...	91	Poor general condition	...	...	2
Disproportion	...	...	32	Specific infection	...	...	1
Hydramnios	...	...	12	Pyloric stenosis	...	...	1
Multiple pregnancy	...	...	37	Congenital abnormality	...	...	2
Multiparity...	...	...	13	Hiatus hernia	...	...	1
Anaemia	...	...	21	Vomiting and constipation	...		1
Placenta prævia	...	...	10	Vomiting blood: jaundiced	...		1
Abortion	...	...	20	Hæmorrhagic disease	...	...	1
Rhesus factor incompatibility	...		30	Atelectasis	...	...	1
Bad obstetric history	...	...	36				
Prolonged labour	...	...	89				
Cardiac complications	...	...	11				
Varicositis	...	...	1				
Domestic reasons	...	...	44				
Glycosuria	...	...	1				
Urinary infection	...	...	7				
Perineal repair	...	...	7				
Intra uterine death	...	...	4				
Fibroids	...	...	4				
Vertigo	...	...	1				
Vaginal hæmotoma	...	...	1				
Retained placenta...	...	...	1				
Sciatica	...	...	1				
Overdose of drugs...	...	...	1				
Hæmatemesis	...	...	1				
Uterine infection	...	...	2				
Pneumonia...	...	...	1				
Chest complications	...	...	3				
Puerperal insanity...	...	...	1				
Post partum hæmorrhage	...		5				
Foetal abnormality	...	...	1				
Foetal distress	...	...	3				
Pulmonary embolism	...	...	1				
Total	...	...	877	Total	...	...	30

2 mothers accompanied babies to hospital.



TABLE 13

CONSULTANTS CALLED TO PATIENTS 1962

Mothers					Babies				
Prolonged labour	...	...	...	7	Cephalhaemotoma...	...	...	...	1
Pre-eclamptic toxæmia	...	...	...	3	Septic spots	...	...	...	1
Malpresentation	...	...	...	2	Not passed urine	...	...	...	1
Postmaturity	...	...	...	2	Very ill	...	...	...	1
Pyrexia	...	...	...	1	Jaundice	...	...	...	1
Ruptured perineum	...	...	...	1	Injury to arm after breech delivery	...	...	...	1
					Congenital defects...	...	...	...	2
Total	...	...	...	16	Total	...	...	...	8
					Domiciliary...	...	...	...	24
					Transferred to Hospital	...	...	...	13

## HOME NURSING SERVICE

	1961	1962
Home Nursing		
Cases brought forward ... ..	2,175	2,468
New cases... ..	12,774	10,084
T.B. Urine Testing:		
Cases brought forward ... ..	—	191
New cases... ..	359	234
Home Nursing visits ... ..	345,756	350,018
T.B. Urine Testing visits ... ..	7,153	8,952
Late Night visits ... ..	4,786	5,040
District Nurse Clinics:		
Cases brought forward, 1/1/62 ... ..	107	120
New cases... ..	331	319
Treatments ... ..	8,733	6,675

	1961	1962
Home Nursing		
Cases brought forward ... ..	2,175	2,468
New cases... ..	12,774	10,084
T.B. Urine Testing:		
Cases brought forward ... ..	—	191
New cases... ..	359	234
Home Nursing visits ... ..	345,756	350,018
T.B. Urine Testing visits ... ..	7,153	8,952
Late Night visits ... ..	4,786	5,040
District Nurse Clinics:		
Cases brought forward, 1/1/62 ... ..	107	120
New cases... ..	331	319
Treatments ... ..	8,733	6,675



TABLE 15

CHIROPODY CLINICS—ATTENDANCES

1962	Central Foot Clinic	Dovecot Clinic	Everton Road Clinic	Westminster Road Clinic	Rathbone Road Clinic	Queens Drive Clinic	Speke Clinic	Lark Lane Clinic	Garston Clinic	Dingle House Clinic	Fazakerley Clinic	St. Anne Street Clinic	Belle Vale Clinic	Alteross Road Clinic	Norris Green Clinic	Rose Lane Clinic	Riverview Centre	League of Welldoer's Club	Toxteth Health Centre, Mill Street (opened October, 1962).
January ...	907	88	93	53	50	71	60	58	68	22	25	41	58	18	28	22	14	38	—
February ...	789	80	103	61	74	81	54	55	56	27	45	20	54	28	45	29	18	29	—
March ...	893	88	131	68	96	100	61	60	55	24	52	29	64	32	70	32	25	22	—
April ...	799	79	102	51	74	72	46	59	63	30	52	32	53	33	44	22	25	27	—
May...	966	108	147	63	82	101	74	64	64	38	64	20	72	24	63	31	27	30	—
June...	707	62	108	56	86	60	64	22	20	17	53	20	86	25	51	19	18	21	—
July...	849	79	97	61	69	88	54	74	84	34	57	38	29	40	60	33	28	37	—
August ...	886	81	98	36	87	90	52	48	36	18	33	21	53	14	65	36	27	26	—
September ...	917	86	157	55	12	87	53	62	64	31	58	26	54	32	68	29	31	33	—
October ...	1,039	114	149	66	71	99	77	68	51	37	77	37	113	37	75	26	38	35	12
November ...	899	83	136	60	97	89	54	54	55	31	82	35	96	30	86	29	31	27	33
December ...	728	79	98	49	66	55	42	41	38	19	44	29	66	29	60	32	28	31	21
TOTALS ...	10,379	1,027	1,419	679	864	993	691	665	654	328	642	348	798	342	715	340	310	356	66

TOTAL OF ALL TREATMENTS: 21,616  
TOTAL AT DISTRICT CLINICS 11,237  
CENTRAL CLINICS 10,379

TABLE 16

## CHIROPODY CLINICS—NUMBER OF WEEKLY SESSIONS

Central Foot Clinic	...	...	...	11
Dovecot	...	...	...	3
Everton Road	...	...	...	5
Westminster Road	...	...	...	2
Rathbone Road	...	...	...	3
Queens Drive, Walton	...	...	...	3
Speke	...	...	...	2
Lark Lane	...	...	...	2
Clifton Street, Garston	...	...	...	2
Dingle House	...	...	...	1
Fazakerley	...	...	...	2
St. Anne Street	...	...	...	1
Belle Vale	...	...	...	3
Altcross Road, Croxteth	...	...	...	1
Norris Green	...	...	...	3
Rose Lane	...	...	...	1
Riverview Centre	...	...	...	1
League of Welldoers' Club	...	...	...	1
Toxteth Health Centre	...	...	...	1
TOTALS	...	...	...	48



TABLE 17

## CHIROPODY SERVICE

## Domiciliary Treatments during 1962.

January	...	...	...	...	48
February	...	...	...	...	99
March	...	...	...	...	85
April	...	...	...	...	77
May	...	...	...	...	74
June	...	...	...	...	91
July	...	...	...	...	53
August	...	...	...	...	107
September	...	...	...	...	90
October	...	...	...	...	114
November	...	...	...	...	96
December	...	...	...	...	90
TOTAL					1,024

TABLE 18  
DIPHTHERIA IMMUNISATIONS IN 1962

	Where Immunised	Under One Year	1—4 Years	5—9 Years	10—14 Years	Totals
Primary Immunisations	General Praetitioners	938	2,484	73	28	3,523
	M. and C.W. Clinics ...	1,634	3,287	84	11	5,016
	Schools ...      ...      ...	—	80	1,204	180	1,464
	Totals ...      ...	2,572	5,851	1,361	219	10,003
Booster Immunisations	General Praetitioners	—	127	506	39	672
	M. and C.W. Clinics ...	—	51	311	51	413
	Schools ...      ...      ...	—	401	3,254	649	4,304
	Totals ...      ...	—	579	4,071	739	5,389

TABLE 19  
SCHICK TESTING OF NURSES

Number Probationer Nurses Tested	...	...	...	73
Number Schick Positive	...	...	...	13
Number Schick Negative	...	...	...	60



TABLE 20  
Primary Diphtheria Immunisations 1953-1962

Where immunised		1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Maternity and Child Welfare Clinics ... ..	...	4,896	3,920	3,974	4,547	4,479	6,861	5,789	13,091	5,479	5,016
	Schools ... ..	3,586	3,732	2,943	2,070	3,008	2,316	3,245	3,926	1,332	1,464
	General Practitioners ...	2,694	2,973	3,212	3,702	3,713	5,761	5,102	8,929	6,375	3,523
TOTALS ... ..		11,176	10,625	10,129	10,319	11,200	14,938	14,136	25,946	13,186	10,003

TABLE 21  
WHOOPING COUGH IMMUNISATIONS, 1962

	Where Immunised	0—4 Years	5—14 Years	Totals
Primary Immunisations	General Practitioners ...	3,395	90	3,485
	M. and C.W. Clinics ...	4,899	83	4,982
	Schools ... ..	21	360	381
	Totals ... ..	8,315	533	8,848
Booster Immunisations	General Practitioners ...	123	476	599
	M. and C.W. Clinics ...	58	311	369
	Schools ... ..	119	1,079	1,198
	Totals ... ..	300	1,866	2,166

TABLE 22  
TETANUS IMMUNISATIONS 1962

	Where Immunised	0—4 Years	5—14 Years	Totals
Primary Immunisations	General Practitioners ...	3,363	103	3,466
	M. and C.W. Clinics ...	4,920	98	5,018
	Schools ... ..	21	360	381
	Totals ... ..	8,304	561	8,865
Booster Immunisations	General Practitioners ...	126	452	578
	M. and C.W. Clinics ...	44	180	224
	Schools ... ..	119	1,079	1,198
	Totals ... ..	289	1,711	2,000



TABLE 23  
POLIOMYELITIS IN 1962  
Doses of Sabin Vaccine

	Where immunised	Date of Birth					Totals
		1962	1961	1943-60	1933-42	Others	
Primary course (Three oral doses)	M. & C.W. Clinics	241	1,994	3,819	1,451	1,664	9,169
	General Practitioners	221	1,118	608	404	627	2,978
	Total ...	462	3,112	4,427	1,855	2,291	12,147
Third Booster Doses	M. & C.W. clinics	AGE GROUPINGS NOT TAKEN					312,996
	General Practitioners						39,333
	Total ...						352,329
Fourth Booster Doses	M. & C.W. clinics	AGE GROUPINGS NOT TAKEN					427
	General Practitioners						808
	Total ...						1,235

Doses of Salk Vaccine

	1962	1961	1943-60	1933-42	Others	Totals
First dose only ... ..	Nil	4	24	38	11	77
Second doses ... ..	2	342	396	112	897	1,749
3rd Booster doses ... ..	AGE GROUPINGS NOT TAKEN					5,040
4th Booster doses ... ..	AGE GROUPINGS NOT TAKEN					69

TABLE 24  
SMALLPOX VACCINATIONS 1958-1962

				1958	1959	1960	1961	1962
BIRTHS				15,662	15,615	15,961	16,492	16,479
Total Primary Vaccinations	...			11,112	9,777	6,654	6,554	15,224
Total Re-vaccinations	...	...		4,128	1,179	169	254	3,692
				15,240	10,956	6,823	6,808	18,916
Total Vaccinated at Clinics	...			9,914	5,480	2,980	3,720	7,535
Total Vaccinated by General Practitioners	...	...		5,326	5,476	3,843	3,088	11,381
				15,240	10,956	6,823	6,808	18,916



TABLE 25  
VACCINATIONS FOR INTERNATIONAL TRAVEL—1962

Month	Yellow Fever	Smallpox. Number of persons vaccinated	T.A.B. Number of full courses	Cholera. Number of full courses	Totals
January ...	281	619	53	85	1,038
February ...	280	772	43	55	1,150
March ...	314	1,022	48	94	1,478
April ...	253	1,688	48	46	2,035
May ...	234	1,717	54	63	2,068
June...	267	680	43	57	1,047
July...	491	297	63	56	907
August ...	287	217	68	46	618
September ...	170	126	57	69	422
October ...	263	114	45	57	479
November ...	263	98	34	70	465
December ...	387	95	39	148	669
Totals ...	3,490	7,445	595	846	12,376

These include vaccinations and immunisations carried out at the Hatton Garden Clinic, aboard ships and at a factory.

TABLE 26

## TUBERCULOSIS CASES ON REGISTERS OF CHEST CLINICS—1962

Number of persons examined for the first time ... ..	5,407	Number found to be free of disease ...	2,790
Number found to be definitely tuberculous as detailed in 'A' below ... ..	506	Number found to be suffering from other conditions ... ..	2,111

DIAGNOSIS	RESPIRATORY			NON-RESPIRATORY			TOTAL			GRAND TOTAL
	Adults		Children	Adults		Children	Adults		Children	
	M.	F.		M.	F.		M.	F.		
A.—NEW CASES examined during the year ... ..	267	138	48	16	31	6	283	169	54	506
B.—CONTACTS examined during the year:										
(a) Definitely tuberculous ...	5	12	21	—	—	1	5	12	22	39
(b) Diagnosis not completed	3	5	8	—	—	—	3	5	8	16
(c) Non-tuberculous ...	931	1,294	2,379	—	—	—	931	1,294	2,379	4,604
C.—CASES written off the Register as Recovered ... ..	407	409	56	30	40	10	437	449	66	952
D.—NUMBER OF CASES on Register on 31st December 1962:										
(a) Definitely tuberculous ...	3,111	2,457	368	132	193	77	3,243	2,650	445	6,338
(b) Diagnosis not completed	19	12	—	—	—	—	19	12	—	31

Number of attendances of patients at the Chest Clinics during the year 1962 ...	27,377	Number of patients under medical treatment at home on 31st December, 1962	852
Number of visits paid by the Tuberculosis Medical Officer to the homes of patients during 1962 ... ..	408	Total number of visits paid to the homes of patients by Tuberculosis Visitors during 1962 ... ..	28,465
Total number of cases vaccinated with B.C.G. during 1962:		* Includes 1,305 newly born babies in Maternity Wards in Sefton General Hospital, Walton General, Mill Road and Liverpool Maternity Hospitals.	
Children ... ..	*2,640		
Others ... ..	184		



TABLE 27  
TUBERCULOSIS—AGE GROUPS, 1962

Age	Male	Female	Total
-1	2	3	5
1	2	1	3
2	5	1	6
3	6	1	7
4	4	2	6
5-9	5	4	9
10-14	8	8	16
15-19	10	11	21
20-24	21	28	49
25-29	27	26	53
30-34	15	17	32
35-39	21	14	35
40-44	14	16	30
45-49	26	16	42
50-54	28	9	37
55-59	29	7	36
60-64	35	11	46
65-69	20	6	26
70-74	10	5	15
75-79	4	5	9
80+	3	2	5
Totals	295	193	488

# TUBERCULOSIS NOTIFICATIONS - 1962 -- AGE GROUPS

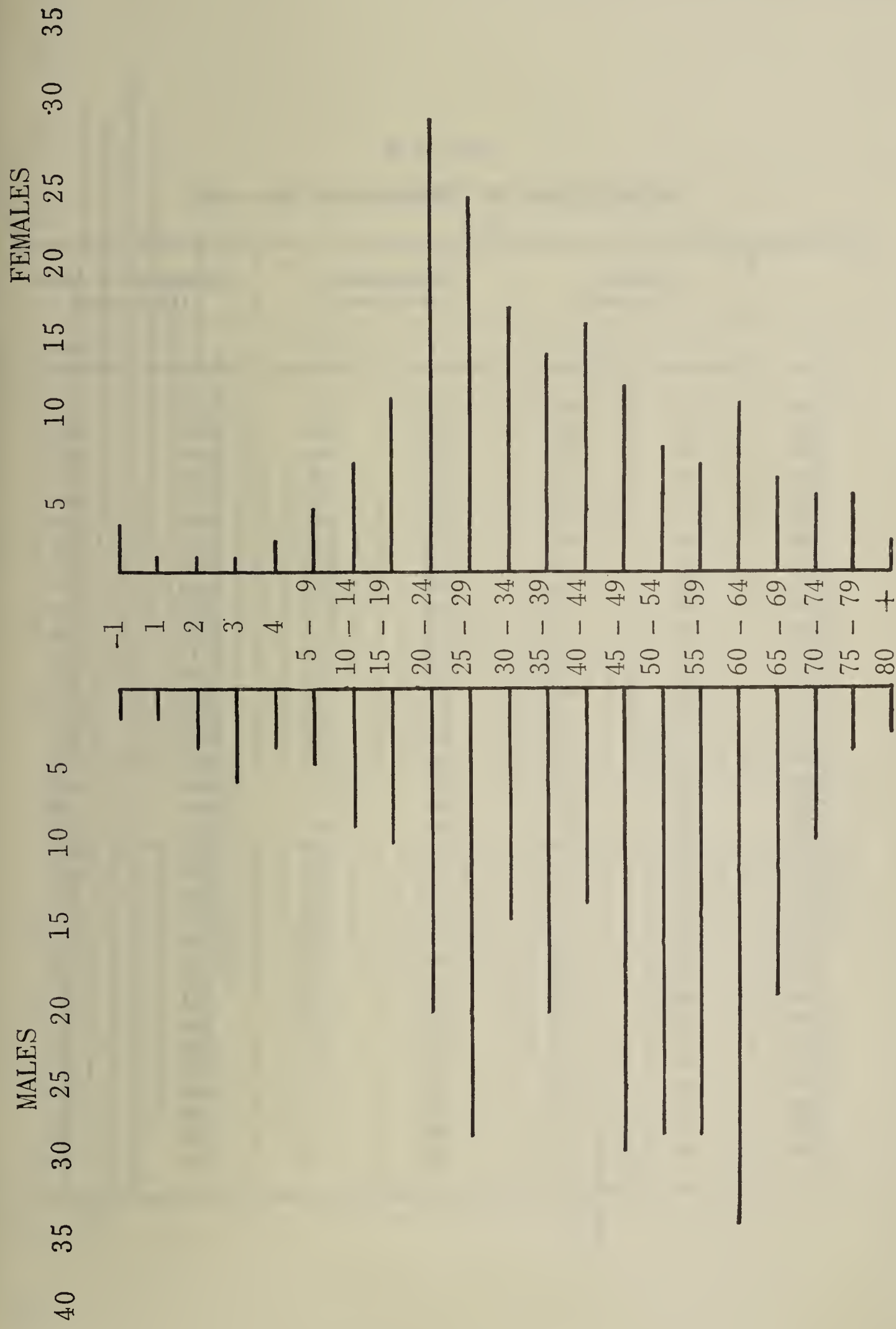




TABLE 28  
NOTIFICATIONS OF TUBERCULOSIS 1928—1962

Year	Children (0-4 years)		Schoolchildren (5-14 years)		Adolescents & Adults (15+ years)	
	Pulmonary	Non- Pulmonary	Pulmonary	Non- Pulmonary	Pulmonary	Non- Pulmonary
1928	93	159	407	244	1968	242
1929	106	164	425	238	1975	269
1930	98	178	470	256	1890	263
1931	88	163	365	267	1805	289
1932	71	125	277	279	1757	268
1933	77	138	262	266	1941	250
1934	56	107	223	234	1624	244
1935	36	93	167	178	1494	231
1936	36	85	185	165	1424	197
1937	30	77	128	159	1397	172
1938	43	82	117	118	1218	186
1939	24	64	72	78	1117	175
1940	26	59	51	67	1234	148
1941	33	68	44	79	1225	158
1942	32	63	54	84	1284	201
1943	47	60	64	107	1368	168
1944	29	45	68	58	1344	147
1945	35	45	60	70	1360	133
1946	35	40	63	72	1380	125
1947	50	37	88	69	1341	128
1948	51	49	79	49	1490	130
1949	63	41	77	63	1479	107
1950	106	32	113	41	1353	91
1951	106	26	101	47	1328	87
1952	90	37	161	35	1318	67
1953	77	18	130	27	1175	78
1954	46	22	114	28	975	97
1955	46	24	82	23	951	71
1956	34	9	88	13	938	81
1957	46	9	79	12	892	80
1958	47	17	61	11	686	48
1959	29	12	54	6	1550	30
1960	17	3	24	5	398	36
1961	19	6	26	6	360	42
1962	24	3	23	2	391	45

# PULMONARY

120 100 80 60 40 20

# NON-PULMONARY

20 40 60 80 100 120 140 160 180 200

1928

1930

1935

1940

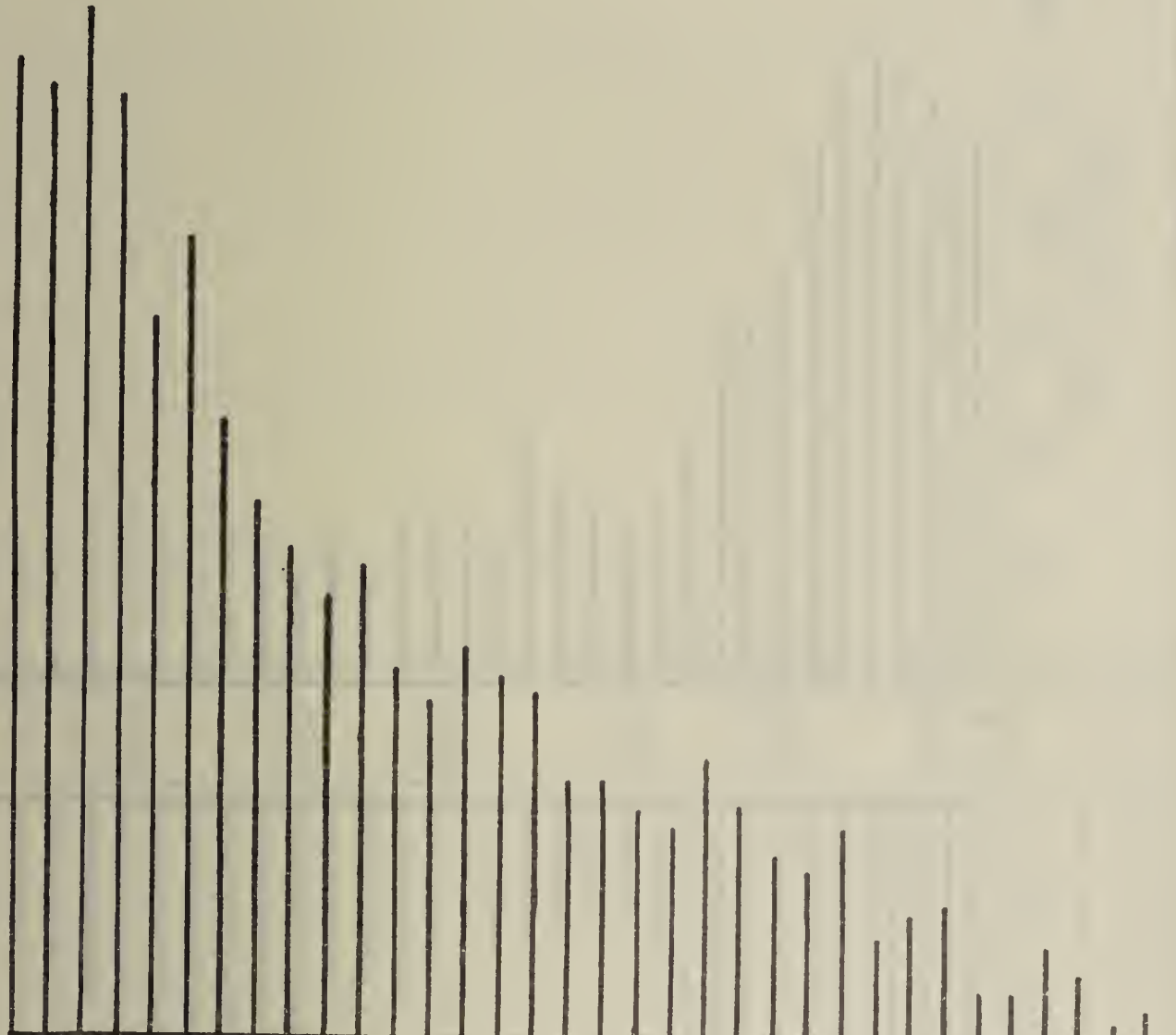
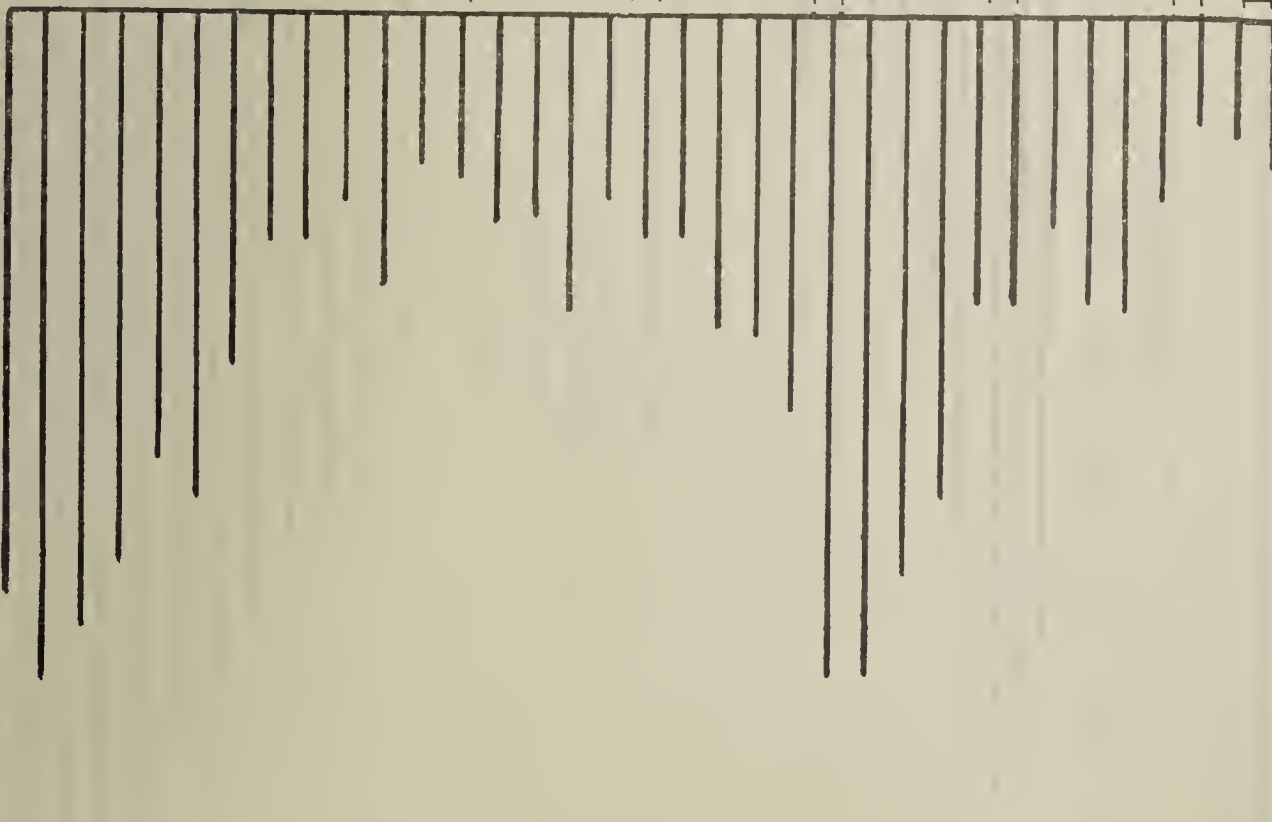
1945

1950

1955

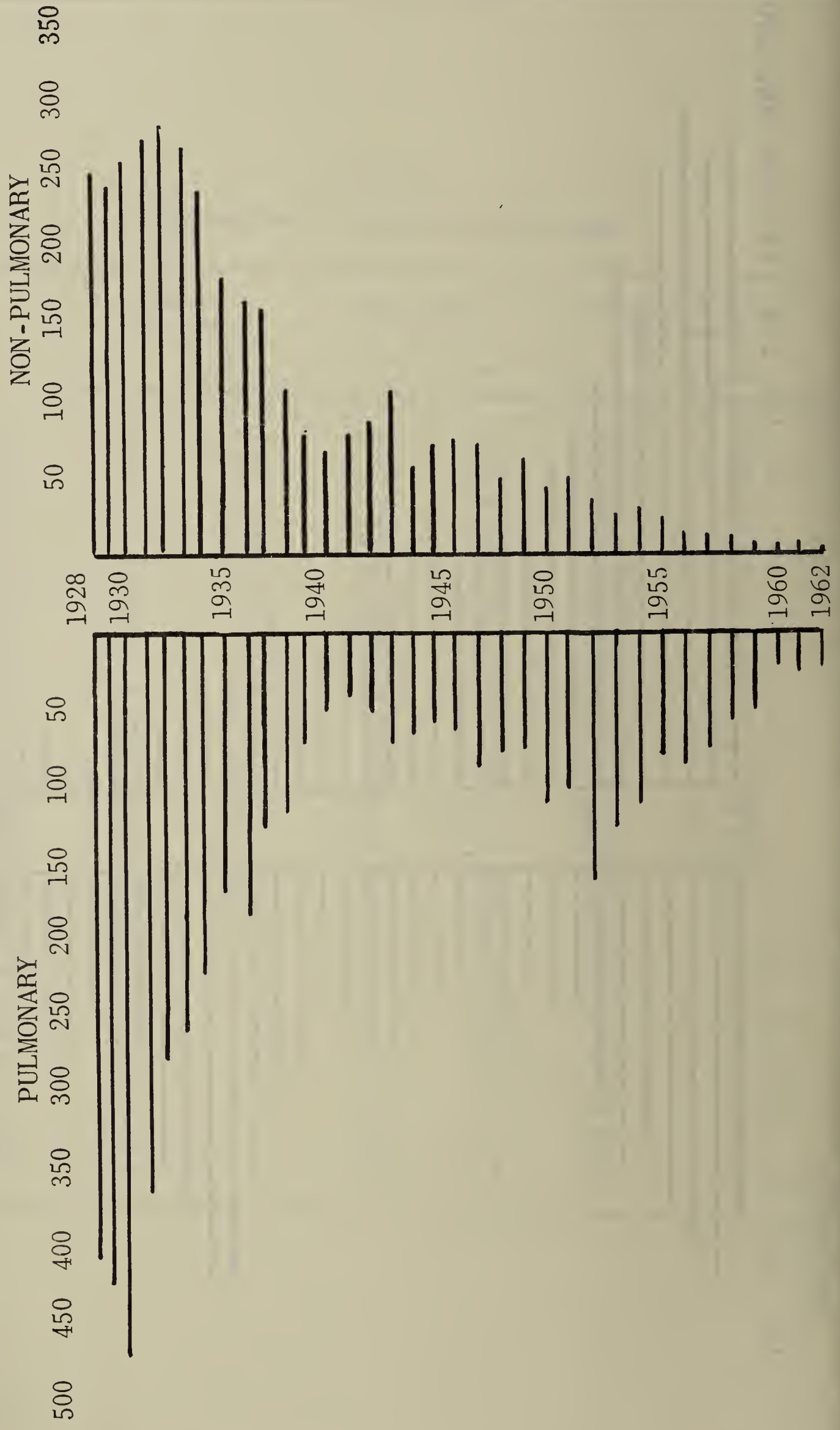
1960

1962





TUBERCULOSIS NOTIFICATIONS OF SCHOOL CHILDREN (5 - 14 years) 1928 - 1962.



PULMONARY

NON - PULMONARY

2000 1800 1600 1400 1200 1000 800 600 400 200

200 400

1928

1930

1935

1940

1945

1950

1955

1960

1962

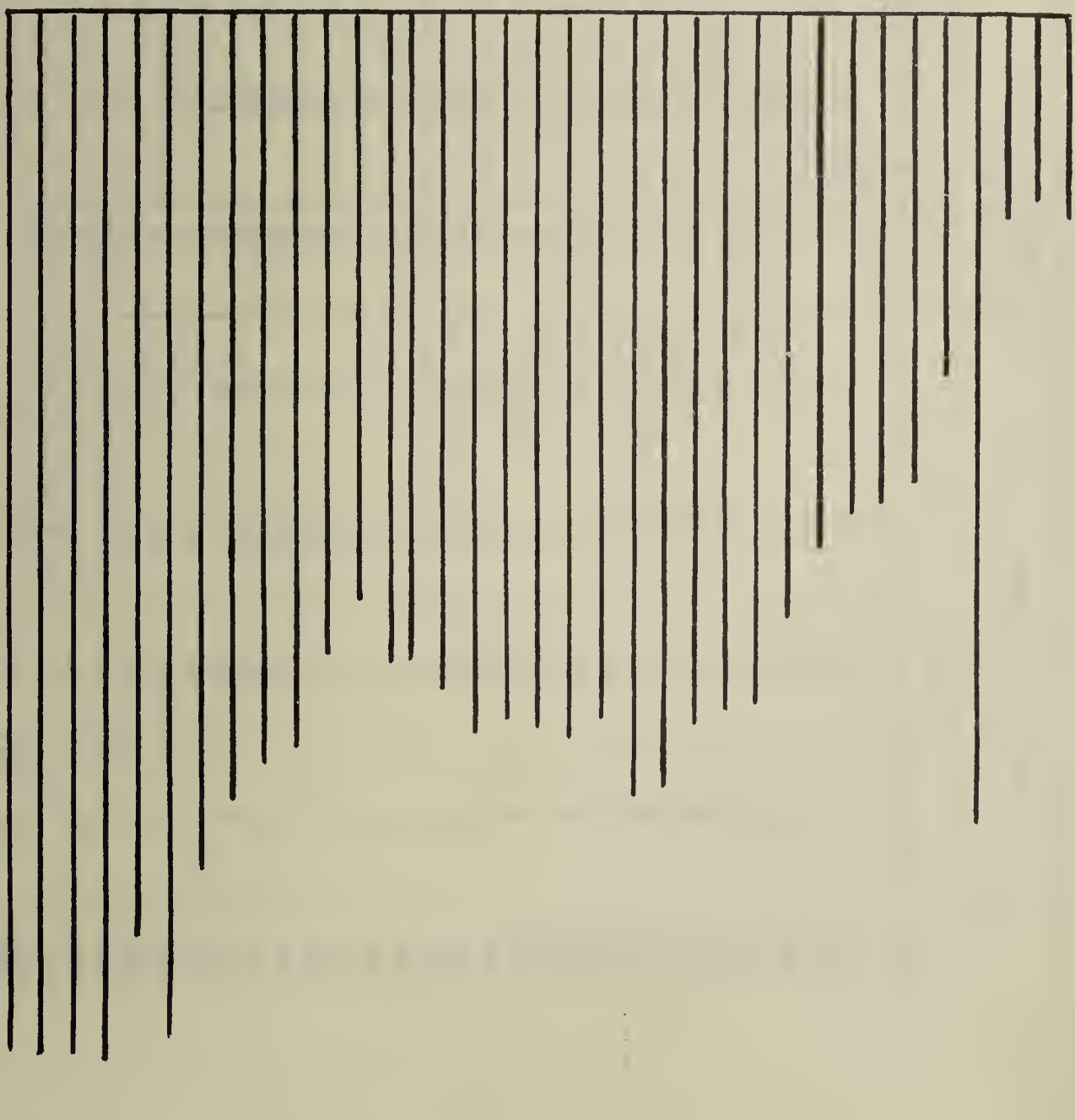




TABLE 29

DEATHS FROM TUBERCULOSIS

Year	Pre-School Children (0-4 Years)			School Children (5-14 Years)			Adolescents & Adults (15+ Years)			Total for all Ages		
	Pulmonary	Non-Pulmonary	Total	Pulmonary	Non-Pulmonary	Total	Pulmonary	Non-Pulmonary	Total	Pulmonary	Non-Pulmonary	Total
1928	27	68	95	37	41	78	957	69	1,026	1,021	178	1,199
1929	27	84	111	40	57	97	991	75	1,066	1,058	216	1,274
1930	21	77	98	45	35	80	983	69	1,052	1,049	181	1,230
1931	12	73	85	21	30	51	956	61	1,017	989	164	1,153
1932	14	67	81	21	34	55	934	69	1,003	969	170	1,139
1933	6	50	56	31	33	64	972	65	1,037	1,009	148	1,157
1934	13	49	62	16	24	40	838	56	894	867	129	996
1935	5	43	48	17	20	37	790	60	850	812	123	935
1936	9	48	57	14	25	39	690	53	743	713	126	839
1937	9	43	52	11	20	31	664	49	713	684	112	796
1938	6	45	51	11	11	22	649	47	696	666	103	769
1939	5	29	34	11	22	33	631	48	679	647	99	746
1940	7	45	52	12	22	34	742	55	797	761	122	883
1941	20	63	83	8	29	37	671	55	726	699	147	846
1942	10	45	55	11	21	32	632	58	690	653	124	777
1943	14	33	47	9	17	26	647	53	700	670	103	773
1944	12	32	44	7	12	19	578	38	616	597	82	679
1945	9	32	41	9	21	30	587	43	630	605	96	701
1946	4	29	33	4	20	24	571	29	600	579	78	657
1947	15	27	42	5	18	23	579	40	619	599	85	684
1948	8	33	41	4	16	20	618	36	654	630	85	715
1949	3	22	25	4	13	17	535	33	568	542	68	610
1950	3	24	27	2	8	10	476	32	508	481	64	545
1951	5	19	24	2	5	7	399	19	418	406	43	449
1952	1	13	14	—	4	4	268	19	287	269	36	305
1953	1	7	8	1	2	3	256	17	273	258	26	284
1954	1	4	5	—	2	2	231	6	237	232	12	244
1955	—	5	5	2	2	4	183	12	195	185	19	204
1956	2	1	3	—	—	—	135	6	141	137	7	144
1957	—	1	1	—	1	1	123	3	126	123	5	128
1958	—	1	1	1	1	2	108	5	113	109	7	116
1959	—	2	2	—	—	—	102	1	103	102	3	105
1960	—	—	—	—	—	—	81	3	84	81	3	84
1961	—	1	1	—	—	—	80	5	85	80	6	86
1962	—	—	—	—	2	2	74	5	79	74	7	81

# PULMONARY

60

50

40

30

20

10

1928

1930

1935

1940

1945

1950

1955

1960

1962

# NON-PULMONARY

90

80

70

60

50

40

30

20

10

1928

1930

1935

1940

1945

1950

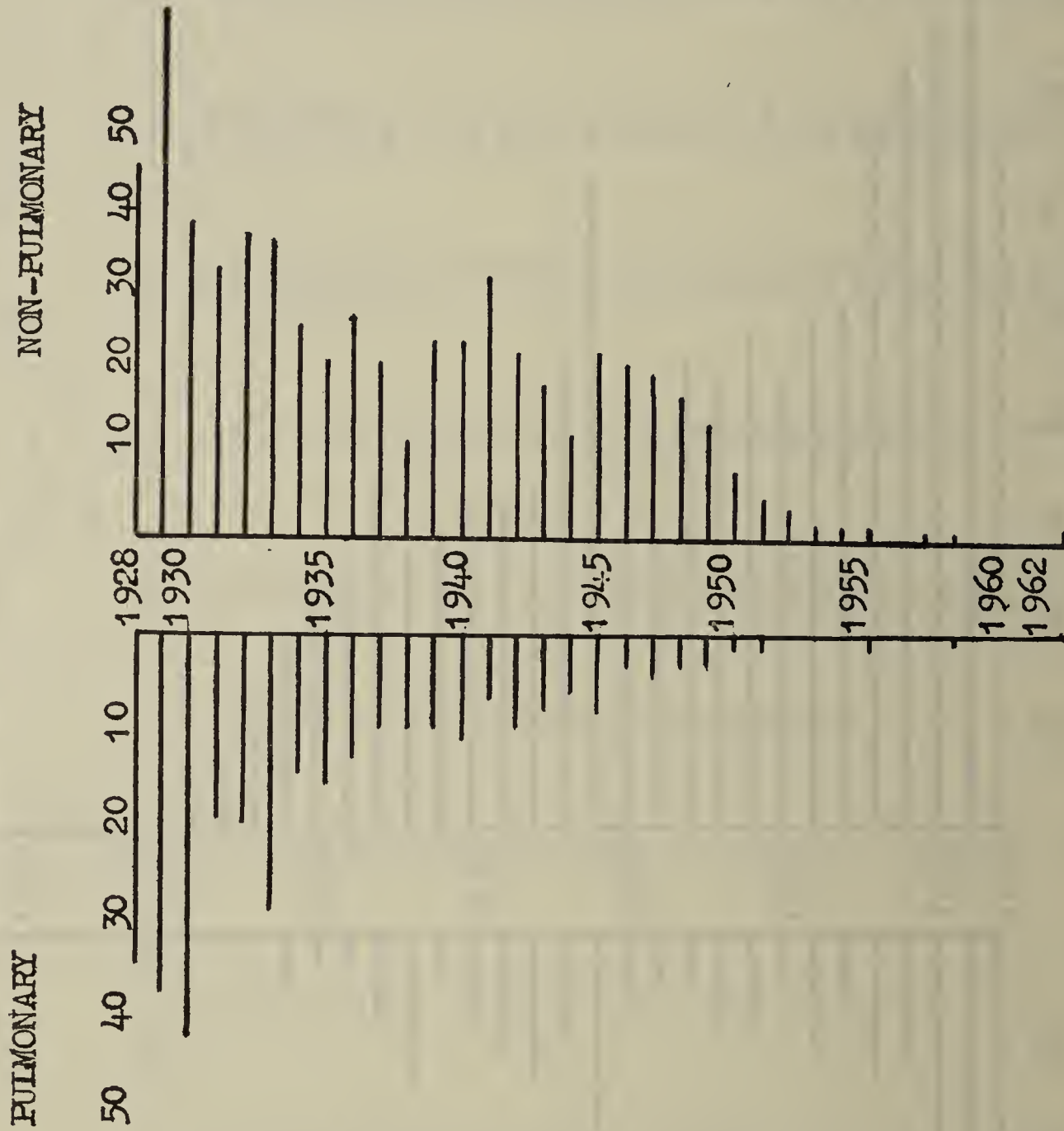
1955

1960

1962



DEATHS FROM TUBERCULOSIS OF SCHOOL CHILDREN (5 - 14 years) 1928 1962.



# PULMONARY

# NON-PULMONARY

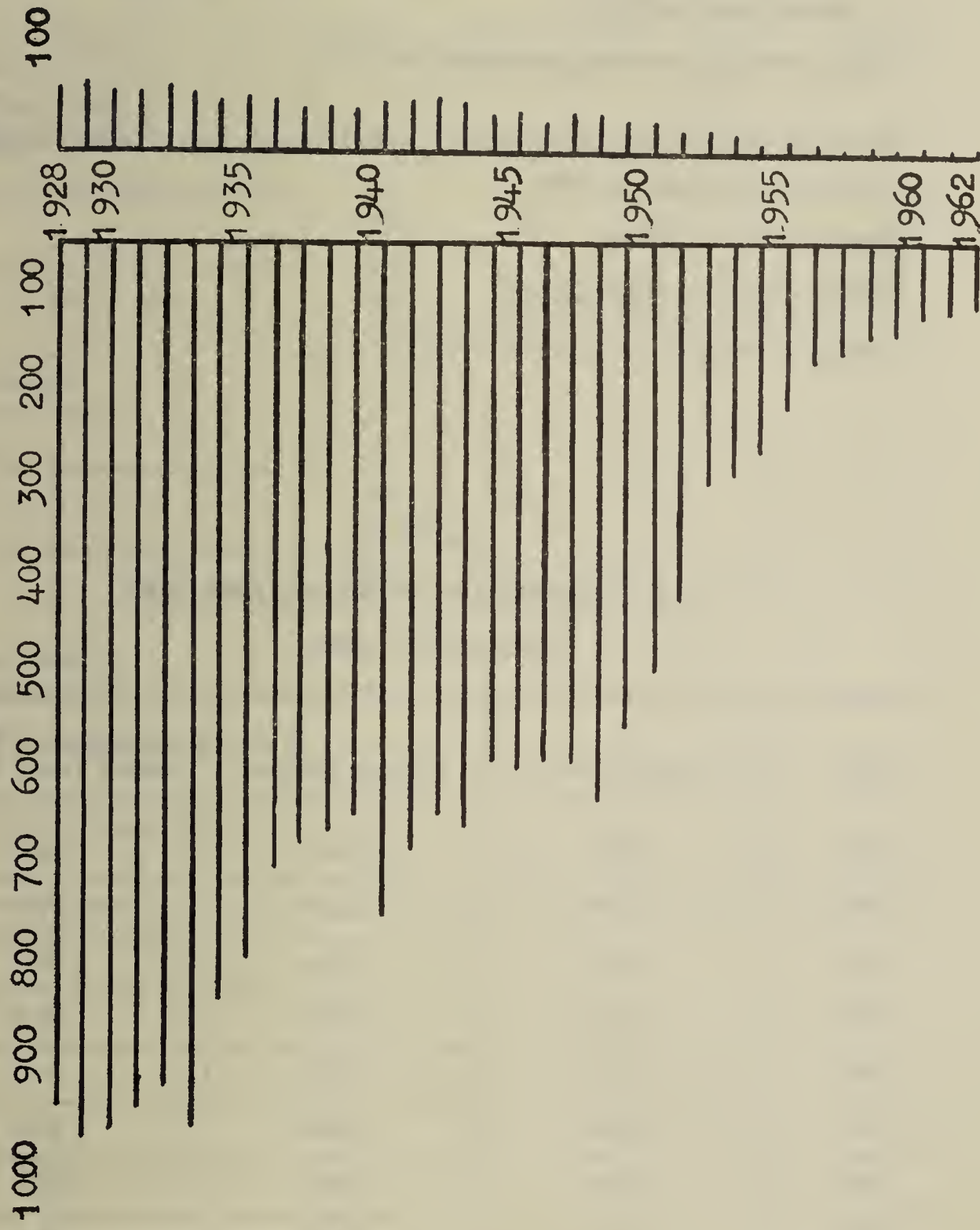




TABLE 30  
B.C.G. VACCINATION  
SCHOOL CHILDREN

Number of children offered B.C.G. vaccination	...	...	...	...	11,667
Number of acceptors	...	...	...	...	9,826
Number of Mantoux tested	...	...	...	...	9,777
Number of positive Mantoux tests	...	...	...	...	1,305
(Also 325 who had previously had B.C.G. at a clinic or who had a family history of T.B.)					
Number of children vaccinated with B.C.G.	...	...	...	...	7,234

The undermentioned figures relate to students at Teacher Training Colleges, who were vaccinated in 1962:

Number Mantoux tested	...	...	...	...	99
Number of positive Mantoux tests	...	...	...	...	64
Number of students vaccinated with B.C.G.	...	...	...	...	31

TABLE 31  
B.C.G. VACCINATION OF SCHOOL CHILDREN  
MANTOUX TESTS

Year	Number Tested	Number Positive	Percentage of Number Tested Found Positive
1954	5,293	1,800	34.0
1955	7,806	2,190	28.0
1956	8,921	2,494	28.0
1957	7,224	1,581	22.0
1958	8,587	1,717	20.0
1959	11,313	1,810	16.0
1960	10,569	1,480	15.0
1961	11,542	1,442	12.5
1962	9,777	1,305	13.3

TABLE 32

## P.A.S. TESTING OF URINE—CENTRAL, EAST &amp; NORTH CHEST CLINICS

1962	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total for Year
<b>Central Chest Clinic:</b>					
No. of Patients tested ... ..	140	98	136	118	492
Patients with unsatisfactory tests	51 36%	8 8%	23 17%	30 25%	112 22%
Patients with satisfactory tests ...	89 64%	90 92%	113 83%	88 74%	380 78%
<b>East Chest Clinic:</b>					
No. of Patients tested ... ..	309	198	113	68	688
Patients with unsatisfactory tests	119 38%	34 38%	9 8%	5 7%	167 24%
Patients with satisfactory tests ...	190 62%	164 72%	104 92%	63 93%	521 76%
<b>North Chest Clinic:</b>					
No. of Patients tested ... ..	283	224	144	138	789
Patients with unsatisfactory tests	128 45%	35 15%	12 9%	29 22%	204 26%
Patients with satisfactory tests ...	155 65%	189 85%	132 81%	109 78%	585 74%



TABLE 33

## CASES OF ACUTE GONORRHOEA, 1938-1962

					Males	Females
1938	...	...	...	...	1,422	141
1946	...	...	...	...	3,112	422
1947	...	...	...	...	1,134	272
1948	...	...	...	...	1,933	174
1949	...	...	...	...	1,441	159
1950	...	...	...	...	1,204	140
1951	...	...	...	...	1,240	113
1952	...	...	...	...	1,026	133
1953	...	...	...	...	910	128
1954	...	...	...	...	816	148
1955	...	...	...	...	862	287
1956	...	...	...	...	932	246
1957	...	...	...	...	1,059	241
1958	...	...	...	...	1,089	292
1959	...	...	...	...	940	231
1960	...	...	...	...	1,013	301
1961	...	...	...	...	1,273	364
1962	...	...	...	...	1,262	297

TABLE 34

## CASES OF EARLY SYPHILIS, 1938-1962

					Males	Females
1938	...	...	...	...	147	32
1946	...	...	...	...	655	331
1947	...	...	...	...	481	248
1948	...	...	...	...	370	155
1949	...	...	...	...	219	85
1950	...	...	...	...	136	50
1951	...	...	...	...	118	33
1952	...	...	...	...	80	18
1953	...	...	...	...	65	13
1954	...	...	...	...	38	6
1955	...	...	...	...	62	15
1956	...	...	...	...	51	8
1957	...	...	...	...	45	3
1958	...	...	...	...	62	7
1959	...	...	...	...	44	8
1960	...	...	...	...	66	1
1961	...	...	...	...	43	4
1962	...	...	...	...	59	10

**TABLE 35**  
**MENTAL HEALTH**

Mentally subnormal persons on waiting list for hospital care at 31st December, 1962 :  
70, comprising:—

Urgency 3 (highest)	...	...	43
Urgency 2	...	...	9
Urgency 1	...	...	11
Urgency 0	...	...	7

These figures can be classified as follows :—

(a) In age and sex groups—

Urgency	Under 6		6—15		16 and over		TOTAL
	Male	Female	Male	Female	Male	Female	
3	6	5	7	6	8	11	43
2	1	1	1	1	3	2	9
1	—	1	2	—	2	6	11
0	—	2	—	1	3	1	7
TOTALS ...	7	9	10	8	16	20	70

(b) Time on waiting list—

Urgency	Over 3 years	2—3 years	1—2 years	6 mths— 1 year	Under 6 months	Total
3	4	8	10	8	13	43
2	1	—	1	—	7	9
1	3	2	—	2	4	11
0	3	—	1	2	1	7
TOTALS ...	11	10	12	12	25	70

**Admissions from Waiting List during 1962**

	Mental Health Act		Informal	Total
	Section 26	Section 60		
Liverpool R.H.B. Hospitals ...	—	1	18	19
Manchester R.H.B. Hospitals	1	1	11	13

NOTE:—There were a further 36 admissions during the year of persons not on the waiting list, mainly following Court action.



TABLE 36

## MENTAL HEALTH

## Training and Occupation of Mentally Disordered People

## 1. Day centres for the Mentally Subnormal administered by Health Department—

FOR CHILDREN			FOR ADULTS		
	Places	No. at 31.12.62		Places	No. at 31.12.62
Training Centres—			Training Centre—		
Princes Road ...	80	63	New Hall (Hawthorn) ...	60	48
Dovecot ...	60	43			
Garston ...	60	54	Workshops—		
New Hall (Cherry Tree)	60	47	New Hall ...	180	172
New Hall (Laburnum) ...	60	49			
	320	256		240	220

## 2. Day Special Care Unit for Mentally Subnormal Children administered by Voluntary Society.

Dorothy Keeling Unit ... 20 places  
(Grant of half daily *per capita* cost made by Corporation.)

## 3. Centre for the Mentally Ill (Occupational Therapy and Social) administered by Health Department.

Johnson Street Centre ... 25 places

## 4. Mentally Subnormal Children in Residential Training Establishments administered by Voluntary Societies.

(Full or part maintenance grant made by Corporation.)

Sunshine Home, East Grinstead... No. at 31.12.62 ... 2  
Laski House, Manchester... No. at 31.12.62 ... 1

## 5. Home Training by Health Department Occupational Therapists.

Number under training at 31.12.62 ... 24

TABLE 37

## MENTAL HEALTH

Persons referred to Mental Health Service in 1962

Sources of Reference	No. of Persons
General Practitioners ... ..	887
Hospitals (Discharge of In-Patients) ... ..	818
Hospitals (after Out-Patient or Day Treatment) ... ..	385
Police and Courts ... ..	52
Relatives, Patients, Public Bodies, etc. ... ..	252
Education Department (Mentally Subnormal Children or School Leavers) ... ..	212
TOTAL ... ..	2,606

## Action taken in the above cases.

Action Taken	No. of Persons
Admitted to Hospital—	
Mental Health Act, Section 29 (Emergency) ... ..	1,117
Mental Health Act, Section 25 (Observation) ... ..	56
Mental Health Act, Section 26 (Treatment) (A) ... ..	14
Mental Health Act, Section 60 (Court) ... ..	38
Informally (B) ... ..	158
(Non-Psychiatric Hospital) ... ..	4
Placed on Community Care List	
(including 658 Psychiatric Hospital discharges) ... ..	1,145
No further action necessary ... ..	74
TOTAL ... ..	2,606

NOTE : (A) 164 Section 26 recommendations were also made for patients first admitted under Sections 29 and 25.

(B) This number represents only a proportion of total informal admissions ; in many cases the Mental Health Service was not involved in admission.



TABLE 38

## AMBULANCE SERVICE—Comparative Statistics for 1961-62

					1961	1962
Diesel Ambulances ...	...	...	...	...	24.4 m.p.g.	23.9 m.p.g.
Petrol Ambulances ...	...	...	...	...	13 m.p.g.	13.7 m.p.g.
Dual Purpose Ambulances...	...	...	...	...	17.2 m.p.g.	17 m.p.g.
Sitting-case Ambulances ...	...	...	...	...	24.9 m.p.g.	23.6 m.p.g.
Vehicle Mileage ...	...	...	...	...	1,014,826	988,487
Fuel—Diesel ...	...	...	...	...	8,493 gallons	11,966 gallons
—Petrol ...	...	...	...	...	51,644 gallons	43,613 gallons
Oil ...	...	...	...	...	967 $\frac{7}{8}$ gallons	870 $\frac{1}{4}$ gallons

Average mileage for the fleet was as follows :—

Type of Vehicle	Average Annual Mileage		Percentage increase/ decrease on 1961
	1961	1962	
Ambulances Petrol ...	14,075	13,449	— 4.4%
Diesel... ..	15,185	13,008	— 14.3%
Sitting-case Ambulances ...	15,081	15,319	+ 1.6%
Sitting case Cars ... ..	13,817	13,184	— 4.6%

TABLE 39

## AMBULANCE SERVICE—Fuel Consumption

Stretcher case ambulances ...	Petrol	13.7 miles per gallon
	Diesel	23.9 „ „ „
Sitting-case ambulances ...	Petrol	17 „ „ „
Sitting-case cars ... ..	Petrol	23.6 „ „ „

Note—The total petrol consumption during 1962 decreased by 8,031 gallons or 15.5 per cent to 43,613 gallons and the diesel fuel consumption increased by 3,473 gallons or 42 per cent to 11,966 gallons.

TABLE 40  
AMBULANCE SERVICE  
INFECTIOUS PATIENTS—1962

Month	Admission	Hospital to Hospital Transfers	Out- Patients	TYPE		Total
				Sitting Cases	Ambulance Cases	
January ...	145	21	148	140	174	314
February ...	141	31	91	91	172	263
March ...	156	22	67	62	183	245
April ...	145	13	88	87	159	246
May ...	179	33	103	102	213	315
June ...	144	30	69	66	177	243
July ...	204	28	26	22	236	258
August ...	226	27	34	31	256	287
September ...	198	15	20	20	213	233
October ...	264	22	30	30	286	316
November ...	273	21	9	9	294	303
December ...	239	11	—	—	250	250
	2,314	274	685	660	2,613	3,273



TABLE 41

AMBULANCE SERVICE—Vehicle Mileage, Petrol, Diesel and Oil Performance, 1962

Ambulance	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
<b>Diesel</b>													
Mileage	22,089	19,343	22,191	20,003	24,871	25,691	25,764	24,397	25,028	25,223	25,268	26,311	286,179
Fuel	941	829	989	849	1,044	1,030	1,036	982	1,034	1,064	1,013	1,155	11,966
Oil	35½	72½	69	52	74	74½	88	81	82½	66½	64	64	823½
<b>Petrol</b>													
Mileage	24,595	21,533	23,356	22,672	22,092	18,916	18,537	18,907	19,451	22,635	21,902	20,942	255,538
Fuel	1,900	1,619	1,716	1,751	1,748	1,253	1,258	1,375	1,377	1,644	1,644	1,319	18,604
Oil	97	98½	93	114	107	112	110	119½	105½	125	90½	83½	1,255½
<b>Dual Purpose</b>													
Mileage	32,525	31,065	33,187	27,463	33,606	28,846	31,277	30,488	29,119	31,303	31,231	27,553	367,663
Fuel	1,900	1,832	2,020	1,697	1,890	1,646	1,744	1,755	1,696	1,864	1,872	1,739	21,655
Oil	76	44	156	46½	90	123	111½	128½	102	93	75½	129½	1,175½
<b>Sitting Case</b>													
Mileage	5,751	6,742	8,421	4,902	6,184	5,310	7,208	5,418	6,484	8,032	8,012	6,643	79,107
Fuel	278	283	348	246	265	217	306	222	258	318	330	283	3,354
Oil	20	19	22	18½	10½	12½	27	15	17	25	23½	16½	226½

(Oil figures in quarts)

ANALYSIS

	Fuel	Oil
Diesel Ambulances ...	23.9 m.p.g.	21.8 m.p.g.
Petrol Ambulances ...	13.7 m.p.g.	12.7 m.p.g.
Dual Purpose Ambulances ...	17.6 m.p.g.	19.6 m.p.g.
Sitting-case Ambulances ...	23.6 m.p.g.	21.8 m.p.g.
Vehicle Mileage	988,487	
Fuel { Diesel	11,966 gallons	
Oil { Petrol	43,613 "	
	870¼ "	

TABLE 42

## Ambulance Service — Patient Removals 1962

[illegible]



TABLE 43  
RESIDENTIAL ACCOMMODATION—AGED PERSONS

The total accommodation available for use on 31st December, 1962, was as follows :—

Establishment					No. of Beds	Date of Opening
Westminster House	...	...	...	...	699	5. 7.1948*
Aigburth House	...	...	...	...	52	16. 7.1953
Altcross House	...	...	...	...	57	11. 4.1957
Beechley	...	...	...	...	38	9.11.1950
Brookfield	...	...	...	...	33	21. 1.1952
Brookside House	...	...	...	...	40	5. 3.1957
Croxteth Lodge	...	...	...	...	30	17.12.1956
Holt House	...	...	...	...	58	24. 9.1953
Lismore	...	...	...	...	36	10.12.1951
Moreno House	...	...	...	...	32	14. 1.1949
New Grafton House	...	...	...	...	109	5. 7.1948*
New Parkfield House	...	...	...	...	27	18.12.1950
Park House	...	...	...	...	20	30.12.1949
Ullet Grange	...	...	...	...	29	13.11.1957
Westdene	...	...	...	...	48	16. 3.1962
Total					1,308	

\* In occupation by the Local Authority prior to 5th July, 1948.

TABLE 44

**PARTICULARS OF PERSONS ADMITTED TO RESIDENTIAL ACCOMMODATION AND  
DESCRIPTION OF THE PREMISES FROM WHICH THEY WERE ADMITTED**

	1	2	3	4	5	6	
1962	Vacated Private House	Vacated Corpora- tion House	Flat	Living with Relatives	One Room	Misc. Lodgings Res. Accom. etc.	Total
January ...	5	2	1	5	1	15	29
February ...	2	—	—	5	1	5	13
March ... ..	1	2	2	8	3	32	48
April ... ..	—	1	1	10	4	12	28
May ... ..	3	—	3	8	2	17	33
June ... ..	2	1	3	9	1	13	29
July ... ..	2	—	4	21	3	16	46
August ...	3	—	4	24	2	19	52
September	5	1	4	14	1	24	49
October ...	4	3	4	11	1	39	62
November ...	6	2	1	7	7	33	56
December ...	18	5	5	15	10	40	93
TOTAL ...	51	17	32	137	36	265	538



TABLE 45  
**TEMPORARY ACCOMMODATION PROVIDED AT LOWER BRECK ROAD  
 UNDER SECTION 21(1)(b) OF THE NATIONAL ASSISTANCE ACT**

Remaining 31.12.61	Admitted	Discharged	Remaining 31.12.62
69	1,105	1,113	61

TABLE 46  
**SOCIAL WELFARE OFFICERS**

The following table includes statistical details relating to the field workers' section during the year:—

Number of personal applications for advice and help	...	1,163
Number of visits paid (including 66 visits to handicapped persons)	... ..	3,030
Number of revisits (including 560 revisits to handicapped persons)	... ..	17,054
Number of persons admitted to:—		
(a) residential accommodation	... ..	538
(b) hospital	... ..	28
Number of visits and revisits in connection with the protection of the property of persons admitted to hospital etc., and the effects of deceased persons with no known relatives	...	1,779
Requests for assistance, either by letter or telephone	...	2,636

TABLE 47  
**REGISTERED BLIND PERSONS**

The following table shows the number of registered blind persons in Liverpool.

Age	Males	Females	Total
0 ... ..	—	—	—
1 ... ..	—	—	—
2 ... ..	—	—	—
3 ... ..	1	1	2
4 ... ..	—	1	1
5—10...	11	11	22
11—15...	12	13	25
16—20...	10	3	13
21—29...	17	23	40
30—39...	49	29	78
40—49...	63	57	120
50—59...	105	96	201
60—64...	62	68	130
65—69...	77	85	162
70—79...	121	271	392
80—84...	62	133	195
85—89...	30	79	109
90+ ... ..	9	29	38
TOTALS ...	629	899	1,528

**TABLE 48**  
**REGISTERED BLIND PERSONS—NEW CASES 1962**

The following table shows by age-groups the number of newly-blinded added to the register during 1962:—

Age Groups				Males	Females	Total
0	...	...		—	—	—
1	...	...		—	—	—
2	...	...		—	—	—
3	...	...		—	—	—
4	...	...		—	2	2
5—10	...	...		—	—	—
11—15	...	...		—	—	—
16—20	...	...		—	—	—
21—29	...	...		—	—	—
30—39	...	...		2	—	2
40—49	...	...		3	5	8
50—59	...	...		4	3	7
60—64	...	...		2	5	7
65—69	...	...		10	9	19
70—79	...	...		13	31	44
80—84	...	...		10	16	26
85—89	...	...		3	18	21
90+	...	...		1	1	2
TOTALS ...				48	90	138

**TABLE 49**  
**PARTIALLY-SIGHTED PERSONS**

The following table shows the number of registered partially-sighted persons in Liverpool:—

Age Groups				Males	Females	Total
0— 1	...	...		—	—	—
2— 4	...	...		1	1	2
5—15	...	...		49	20	69
16—20	...	...		14	13	27
21—49	...	...		29	23	52
50—64	...	...		28	27	55
65+	...	...		44	130	174
TOTALS ...				165	214	379



TABLE 50

**PARTIALLY-SIGHTED PERSONS—NEW CASES 1962**

The following table shows by age groups the number of new cases of partially-sighted persons added to the register during 1962:—

Age Groups			Males	Females	Total
0— 1	...	...	—	—	—
2— 4	...	...	1	1	2
5—15	...	...	8	1	9
16—20	...	...	—	—	—
21—49	...	...	3	1	4
50—64	...	...	3	7	10
65 +	...	...	15	20	35
TOTALS			30	30	60

TABLE 51

**FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY-SIGHTED PERSONS**

(i) Number of cases registered during the year in respect of which Section F of Form B.D.8 recommends :—	Cause of Disability			
	Cataract	Glaucoma	Retrolental Fibroplasia	Other
(a) No treatment ... ..	30	3	1	38
(b) Treatment (medical, surgical or optical) ...	32	25	—	69
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment ... ..	17	22	—	49

TABLE 52

AGED PERSONS AND HANDICAPPED PERSONS IN ESTABLISHMENTS PROVIDED  
BY OTHER LOCAL AUTHORITIES AND BY VOLUNTARY ORGANISATIONS.

STATEMENT OF ADMISSIONS, DISCHARGES AND DEATHS.

Authority or Organisation	Remaining 31.12.61	Ad- mitted	Dis- charged	Died	Remaining 31.12.62
Alexian Bros. Home, Manchester ...	3	—	—	—	3
Amphill Cheshire Home ...	1	—	—	—	1
"Angers House" for Spasties, Liverpool ...	6	—	—	—	6
Ashley House, Bognor Regis ...	1	—	—	—	1
British Legion Home, Ripon ...	2	—	1	—	1
British Legion Home, Bwlch ...	1	—	—	—	1
Catholic Blind Institute, Liverpool ...	24	11	7	2	26
Charles Best House, Parkgate ...	5	5	5	—	5
Church Army Home, Bootle ...	3	3	1	—	5
Convent of the Good Shepherd, Liverpool ...	4	—	—	—	4
Coomb Cheshire Home ...	1	1	1	—	1
Cotebrook Home for Cripples ...	2	—	1	—	1
David Lewis Epileptic Colony ...	10	3	3	—	10
Enham Alamein Village Centre, Hants. ...	2	1	1	—	2
Fair Lawn, Lytham ...	1	—	—	—	1
Herefordshire County Association for the Blind ...	1	—	1	—	—
"Honresfeld" Cheshire Home ...	1	—	—	—	1
Home and Hospital for Jewish Incurables, London ...	1	—	—	—	1
Jewish Blind Home, Surrey ...	3	—	—	—	3
Langho Epileptic Colony (Manchester Corporation) ...	19	5	3	—	21
Leonard Cheshire Home, Sandbach ...	1	2	1	—	2
Liverpool Home for Aged Mariners ...	7	3	3	—	7
Maghull Homes for Epileptics ...	50	22	15	—	57
"Maryland", Formby ...	1	—	—	—	1
Methodist Home, Liverpool ...	8	—	—	—	8
Methodist Home, Colwyn Bay ...	1	—	—	—	1
Mutual Aid Homes, Minehead ...	2	—	—	—	2
Nazareth House, Ditton ...	1	20	2	4	15
National Institute for the Deaf, Bath ...	1	—	—	—	1
Papworth Village Settlement, Cambridge ...	—	2	—	—	2
Pomeroy House, Devon ...	1	—	—	—	1
"Ponds" Home for Spastics ...	1	—	—	—	1
Red Cross Home, Buxton ...	1	—	—	—	1
Red Cross Home, Portmadoc ...	1	—	—	—	1
Royal National Institute for the Blind, West Kirby ...	1	1	—	—	2
Royal School for the Blind, Leatherhead ...	3	1	1	—	3
Royal Alfred Home, Kent ...	4	1	1	—	4
St. Elizabeth's Home for Epileptics, Much Hadham ...	2	—	—	—	2
Salvation Army Home, Bootle ...	6	2	1	—	7
Salvation Army Home, Liverpool ...	11	4	3	1	11



TABLE 52—continued

Authority or Organisation	Remaining 31.12.61	Ad- mitted	Dis- charged	Died	Remaining 31.12.62
Salvation Army Home, Ripon Lodge	1	—	1	—	—
Salvation Army Home, Clevedon ...	—	1	—	—	1
Salvation Army Home, Exeter ...	—	1	—	—	1
“ Stapely ”, Home for Aged Jews, Liverpool ... ..	21	15	14	—	22
“ Sundale ”, Liverpool ... ..	6	2	1	—	7
“ Sundene Lodge ”, Waterloo ...	1	—	1	—	—
Turner Memorial Home, Liverpool ...	24	23	17	—	30
West Riding Cheshire Home, “ Kenmore ” ... ..	—	1	1	—	—
West Riding Cheshire Home, “ White Windows ” ... ..	—	1	1	—	—
W.V.S., “ Warriston ”, Liverpool	2	1	1	—	2
“ Woodlands ”, Edinburgh ... ..	1	—	—	—	1
52/54 Croxteth Road, Liverpool (Old People’s Hostels Association)	11	3	1	2	11
25/27 Sefton Drive, Liverpool (Old People’s Hostels Association)	11	2	2	1	10
Bootle Corporation ... ..	2	1	—	1	2
Bristol Corporation ... ..	1	—	—	—	1
Caernarvon County Council ... ..	1	—	—	1	—
Cheshire County Council ... ..	1	2	1	—	2
Chester Corporation ... ..	1	—	—	—	1
Clackmannan County Council ...	1	—	—	—	1
Essex County Council ... ..	1	—	—	1	—
London County Council ... ..	1	1	2	—	—
Soke of Peterborough ... ..	—	2	2	—	—
Southport Corporation ... ..	—	1	—	—	1
Staffordshire County Council ...	—	1	—	—	1
Wallasey Corporation ... ..	1	—	—	1	—
Worcestershire County Council ...	2	—	—	—	2
TOTALS ... ..	284	145	96	14	319

TABLE 53  
MEDICAL EXAMINATIONS

Department	Admission to Super-annuation Scheme		Extension of Sick pay		Fitness of newly appointed officer		Suitability to Continue employment		Total
	Fit	Unfit	Fit	Unfit	Fit	Unfit	Fit	Unfit	
Airport ... ..	—	—	—	—	4	—	2	—	6
Art Gallery ... ..	4	—	—	—	—	—	—	2	6
Baths ... ..	18	—	—	—	3	—	3	3	27
Building Surveyor's ... ..	—	—	—	—	8	—	—	—	8
Children's ... ..	3	—	4	—	51	1	5	1	65
City Analyst ... ..	—	—	—	—	1	—	—	—	1
City Architect's ... ..	127	4	22	1	25	—	44	12	235
City Engineer's ... ..	231	13	91	15	60	—	27	13	450
City Lighting ... ..	23	2	2	—	1	—	—	4	32
City Treasury ... ..	3	—	2	1	70	—	4	1	81
Education ... ..	69	8	10	2	245	—	22	37	393
Fire Service ... ..	3	—	—	—	7	—	1	—	11
Health ... ..	69	4	2	1	221	1	25	5	328
Libraries ... ..	6	—	1	—	59	1	1	3	71
Magistrates ... ..	1	—	—	—	9	—	—	—	10
Markets ... ..	16	1	1	—	1	—	1	—	20
Mersey Tunnel ... ..	22	—	6	3	3	—	*24	1	59
Museums ... ..	2	—	—	—	6	—	—	—	8
Parks and Gardens ... ..	60	3	2	—	38	1	1	7	112
Passenger Transport ... ..	547	7	3	—	29	—	7	22	615
Police ... ..	25	1	1	—	16	—	2	6	51
Probation ... ..	1	—	—	—	13	—	—	—	14
Town Clerk's ... ..	—	—	1	—	30	—	2	1	34
Water ... ..	49	1	16	3	21	—	4	1	95
Weights and Measures ... ..	—	—	—	—	4	—	—	—	4
TOTAL ... ..	1,279	44	164	26	925	4	175	119	2,736

\*Included in this figure are 21 employees who had examinations as a periodical check on their general health.



TABLE 54

## PARTICULARS OF SHOPS INSPECTIONS

Total Number of Shops—15,000 (approx.)

Inspections						
Retail Food Shops ...	...	...	...	...	...	5,192
Retail Non-Food Shops	...	...	...	...	...	3,370
Cafes, Restaurants, etc.	...	...	...	...	...	1,221
Fried Fish Shops ...	...	...	...	...	...	695
Clubs ...	...	...	...	...	...	1,406
Hairdressers ...	...	...	...	...	...	287
Pet Stores ...	...	...	...	...	...	122
Wholesale Shops ...	...	...	...	...	...	16,935
Wholesale Warehouses	...	...	...	...	...	771
Street Traders ...	...	...	...	...	...	445
Places of Entertainment	...	...	...	...	...	83
Merchandise Marks Act	...	...	...	...	...	1,295
Special Visits ...	...	...	...	...	...	109
Half-holiday Closing—						
Visits to shops after 1 p.m.	...	...	...	...	...	2,215
Evening closing—						
Visits to Shops ...	...	...	...	...	...	22,811
Sunday Closing—						
Visits to Shops on Sunday	...	...	...	...	...	1,388
Notices						
Shops' Act, 1950 ...	...	...	...	...	...	387
Food Hygiene Regulations	...	...	...	...	...	278
Food Byelaws ...	...	...	...	...	...	15

TABLE 55

## RETAIL FOOD BUSINESSES

[illegible]



TABLE 56

**FACTORY INSPECTION**

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**FACTORIES ACTS, 1962**

**Part I of the Act**

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1. INSPECTIONS for purposes of provisions as to health (including inspections made by the Public Health Inspectors).

Premises (1)	Number on Register (2)	Number of		
		Inspection (3)	Written Notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4, and 6 are to be enforced by local authorities ...	872	1,036	6	—
(ii) Factories not included in (i) in which Section 7 is enforced by local authority	2,865	3,202	44	—
(iii) Other premises in which Section 7 is enforced by the local authority (excluding outworkers premises) ... ..	53	276	2	—
TOTAL ... ..	3,790	4,514	52	—

TABLE 57  
**FACTORIES ACTS**

2. CASES IN WHICH DEFECTS WERE FOUND

Particulars  (1)	Number of Cases in which Defects were found				Number of Cases in which Prosecu- tions were instituted (6)
	Found  (2)	Remedied  (3)	To H.M. Inspector (4)	By H.M. Inspector (5)	
Want of cleanliness (S.1) ...	5	5	1	1	—
Overcrowding (S.2) ...	—	—	—	—	—
Unreasonable temperature (S.3)	1	1	1	—	—
Inadequate ventilation (S.4) ...	—	—	—	—	—
Ineffective drainage of floors (S.6) ...	—	—	—	—	—
Sanitary Conveniences (S.7)—					
(a) Insufficient ...	9	9	—	4	—
(b) Unsuitable or defective ...	44	*47	—	8	—
(c) Not separate for sexes ...	5	5	—	—	—
Other offences against the Act (not including offences re- lating to outwork) ...	11	4	6	3	—
TOTAL ...	75	71	8	16	—

\*Includes 3 from previous year.

TABLE 58  
**FACTORIES ACTS**  
**Part VIII of the Act**  
**OUTWORK**  
 (SECTIONS 110 AND 111)

Nature of Work (1)	SECTION 110			SECTION 111		
	No. of out- workers in August list required by Section 110 (1) (c) (2)	No. of cases of default in sending lists to the Council (3)	No. of prosecu- tions for failure to supply lists (4)	No. of instances of work in unwhole- some premises (5)	Notices served (6)	Prosecu- tions (7)
Wearing apparel— making, etc.	173	—	—	—	—	—
Making of Christmas articles (Class 29)	16	—	—	—	—	—
TOTAL ...	189	—	—	—	—	—



TABLE 59

## CARCASSES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE OR IN PART

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed 524,372	33,038	32,671	10,789	331,387	116,487
Number inspected 524,372	33,038	32,671	10,789	331,387	116,487
<b>All Diseases except Tuberculosis and Cysticerci.</b>					
Whole carcasses condemned	22	119	453	1,909	1,040
Carcasses of which some part or organ was condemned	4,554	11,773	1,059	85,532	13,008
Percentage of number in- spected affected with disease other than tuber- culosis and cysticerci ...	13·8%	36·4%	14·0%	26%	12%
<b>Tuberculosis only.</b>					
Whole carcasses condemned	11	7	—	—	12
Carcasses of which some part or organ was condemned	91	39	—	—	1,762
Percentage of the number inspected affected with tuberculosis ...	0·3%	0·1%	—	—	1·5%
<b>Cysticercosis.</b>					
Carcasses of which some part or organ was condemned	15	23	—	—	—
Carcasses submitted to refrigeration ...	15	23	—	—	—
Generalised and totally condemned ...	—	—	—	2	—

SUMMARY OF PROSECUTIONS (Cases Heard)—Year 1962

Act	Section	No. of Informations or Complaints	Penalties £ s. d.	Costs £ s. d.	Orders
Public Health Act, 1936 Public Health Act, 1936 Public Health Act, 1936 Public Health Act, 1936	75	4	3 0 0	—	—
	94	16	19 0 0	—	9
	95	—	—	—	—
	290 (6)	13	26 5 0	—	—
	154	3	4 0 0	—	—
Shops Act, 1950	Evening Closing	8	5 0 0	—	—
Shops Act, 1950	Half-holiday Closing Sunday Closing	— 2	— 2 0 0	— —	— —
Food and Drugs Act, 1955	(Food not of quality demanded)	2	25 0 0	4 0 0	—
Food and Drugs Act, 1955	(Selling Gin with 9% added water)	1	5 0 0	4 0 0	—
Food and Drugs Act, 1955	(Selling Milk with added water)	12	42 0 0	15 11 0	—
Food and Drugs Act, 1955, and Food Hygiene (General) Regulations, 1960	—	51	145 0 0	—	—
TOTALS	...	112	£276 5 0	£23 11 0	9



TABLE 61

## CLEAN AIR ACT, 1956—INSPECTIONS, OBSERVATIONS, ETC.

## PARTICULARS OF INSPECTIONS

Total number of inspections to secure smoke control	...	...	...	...	...	...	...	...	6,739
Incidental visits	...	...	...	...	...	...	...	...	26,204
Re-visits	...	...	...	...	...	...	...	...	21,125
Special visits	...	...	...	...	...	...	...	...	8,024
Advisory visits	...	...	...	...	...	...	...	...	27,274
Total number of appliances examined	...	...	...	...	...	...	...	...	11,089
Number of mechanical stokers	...	...	...	...	...	...	...	...	38

## OBSERVATIONS

## Industrial Chimneys

Routine observations	...	...	...	...	...	...	...	...	342
Total minutes of excess smoke recorded	...	...	...	...	...	...	...	...	35
Special observations	...	...	...	...	...	...	...	...	21
Warning letters issued	...	...	...	...	...	...	...	...	4

## SHIPPING

Routine observations	...	...	...	...	...	...	...	...	156
Total minutes of excess smoke recorded	...	...	...	...	...	...	...	...	88
Warning letters issued	...	...	...	...	...	...	...	...	15

## CLEAN AIR ACT, 1956—SECTION 3

## APPROVAL OF NEW FURNACES

Notices of intentions to instal received	...	...	...	...	...	...	...	71
Application for approval received	...	...	...	...	...	...	...	64
Application returned for modification	...	...	...	...	...	...	...	2
Installations approved	...	...	...	...	...	...	...	64

## CLEAN AIR ACT, 1956—SECTION 10

## HEIGHTS OF NEW CHIMNEYS

Plans examined to check chimney height	...	...	...	...	...	...	...	65
Plans approved	...	...	...	...	...	...	...	62
Plans approved after chimney height increased	...	...	...	...	...	...	...	3
Plans withdrawn	...	...	...	...	...	...	...	1

TABLE 62

ATMOSPHERIC POLLUTION MEASUREMENT  
STANDARD DEPOSIT GAUGE

The results are quoted in tons per square mile per month and the averages are as follows :—

[illegible]

TABLE 63

**ESTIMATION OF SULPHUR TRIOXIDE POLLUTION**

**LEAD PEROXIDE METHOD**

The daily average for the year is quoted in milligrams per 100 square centimetres.

[illegible]



TABLE 64

ATMOSPHERIC POLLUTION MEASUREMENT  
Smoke and Sulphur Dioxide Volumetric Filter

	SMOKE												S.O. <sub>2</sub>												
	J.	F.	M.	A.	My	Jn.	Jy.	A.	S.	O.	N.	D.	J.	F.	M.	A.	My	Jn.	Jy.	A.	S.	O.	N.	D.	
Average Value	123	93	148	103	76	49	72	53	80	107	HATTON GARDEN			481	314	370	255	190	125	157	117	204	338	477	508
Highest Value	333	278	300	284	212	96	275	134	174	166	399	515	1,360	720	695	443	422	335	350	299	427	657	1,170	1,100	
Lowest Value ...	36	15	46	35	29	11	23	21	36	47	56	70	167	123	153	140	87	62	62	81	92	123	276	126	
Average Value	328	278	353	266	156	107	117	108	240	305	434	GARSTON			378	365	357	260	329	300	268	325	395	446	333
Highest Value	656	480	704	588	444	324	372	224	684	800	796	784	1,250	1,021	596	344	580	556	552	507	850	625	1,167	642	
Lowest Value ...	76	88	76	76	16	36	28	32	105	36	112	28	133	38	132	126	98	137	135	169	162	219	194	107	
Average Value	144	122	188	129	87	54	68	53	95	142	214	175	WOOLTON			357	365	368	242	198	201	223	327	394	333
Highest Value	405	399	367	270	225	93	203	139	211	242	750	510	847	727	643	469	520	385	614	333	515	530	1,211	756	
Lowest Value...	41	58	86	77	27	16	32	32	50	70	79	86	132	200	164	161	121	90	84	115	104	166	174	131	
Average Value	151	123	153	101	56	36	41	41	69	118	123	CROXTETH			302	227	258	168	166	153	151	167	248	258	—
Highest Value	304	309	318	170	153	71	140	80	132	228	212	—	820	398	480	308	297	308	288	239	310	404	487	—	
Lowest Value...	50	47	57	31	21	6	14	27	38	58	55	—	160	144	122	110	79	75	83	81	89	125	160	—	

TABLE 65

## COMPULSORY PURCHASE ORDERS CONFIRMED 1962

Date Confirmed	Order	Houses	Population
20.3.62	Whittle Street Area Compulsory Purchase Order ...	40	149
21.6.62	Berkley Street Clearance Area Compulsory Purchase Order ... ..	97	784
13.7.62	Church Flags Clearance Area Compulsory Purchase Order ... ..	3	7
28.9.62	Amity Street No. 2 Clearance Area Compulsory Purchase Order ... ..	14	43
29.11.62	Malta Street Area Compulsory Purchase Order ...	54	254
		208	1,237



TABLE 66

## CLEARANCE AREAS NOT YET CONFIRMED BY THE MINISTER

Area	Houses	Population
Melbourne Street Clearance Area 1959 ... ..	113	461
Radcliffe Street Clearance Area 1959 ... ..	112	411
Radcliffe Street No. 2 Clearance Area 1959 ... ..	40	165
Radcliffe Street No. 3 Clearance Area 1959 ... ..	234	1,013
Baker Street No. 1 Clearance Area 1960 ... ..	195	681
Baker Street No. 2 Clearance Area 1960 ... ..	8	33
Baker Street No. 3 Clearance Area 1960 ... ..	150	453
Greenwood Street No. 1 Clearance Area 1960 ... ..	192	683
Greenwood Street No. 2 Clearance Area 1960 ... ..	6	29
Netherfield Road North No. 4 Clearance Area 1960 ... ..	5	23
Palatine Street Clearance Area 1960 ... ..	82	296
Plumpton Street Clearance Area 1960 ... ..	11	65
Plumpton Street No. 2 Clearance Area 1960 ... ..	10	71
Rankin Street Clearance Area 1960 ... ..	37	179
Winter Street Clearance Area 1960 ... ..	21	55
Newlands Street No. 1 Clearance Area 1961 ... ..	220	869
Newlands Street No. 2 Clearance Area 1961 ... ..	4	13
Torr Street No. 4 Clearance Area 1961 ... ..	10	62
Gordon Street Clearance Area 1961 ... ..	142	666
Kepler Street No. 1 Clearance Area 1961 ... ..	178	629
Kepler Street No. 2 Clearance Area 1961 ... ..	3	16
Hibbert Street Clearance Area 1961 ... ..	177	646
Rose Vale No. 4 Clearance Area 1961 ... ..	4	33
Blackstone Street Clearance Area 1961 ... ..	6	35
Edinburgh Street Clearance Area 1962 ... ..	409	1,596
Thomas Street (Garston) Clearance Area 1962 ... ..	48	173
Dale View (Garston) Clearance Area 1962 ... ..	18	58
Everton Brow Clearance Area 1962 ... ..	7	85
Aigburth Vale Clearance Area 1962 ... ..	144	418
Portwood Street Clearance Area 1962 ... ..	91	331
Seacombe Street Clearance Area 1962 ... ..	330	1,287
	3,007	11,535

TABLE 67

## SUMMARY OF RODENT INFESTATIONS AND DISINFESTATIONS OF BUILDINGS AND LANDS DURING THE YEAR 1962

Description of Premises	Infestations				Reinfestations during the Year				Category		Total infestations and reinfestations	Total remedied
	Premises	Rats	Rats and Mice	Mice	Premises	Rats	Rats and Mice	Mice	Major	Minor		
Shops ... ..	553	233	14	306	24	7	1	17	—	578	578	568
Factories ... ..	312	164	19	129	26	12	1	13	—	338	338	329
Warehouses ... ..	241	153	17	71	5	5	—	1	—	247	247	249
Dwelling-houses ... ..	2,502	1,622	5	875	51	36	—	18	—	2,556	2,556	2,673
Other buildings and lands ... ..	972	466	33	473	46	11	—	38	—	1,021	1,021	1,025
Food premises (included in above)...	(716)	(308)	(22)	(386)	(18)	(11)	(7)	(11)	(—)	(739)	(739)	(627)
TOTAL ... ..	4,580	2,638	88	1,854	152	71	2	87	—	4,740	4,740	4,844

NOTE :—Infestations remedied include 432 outstanding from 1961.



TABLE 68  
**RAT DESTRUCTION IN SEWERS.**  
**MAINTENANCE TREATMENTS.**

Sewer Manholes treated	Initial Treatment 1953	MAINTENANCE TREATMENTS		
		1962 (1)	1962 (2)	1962 (3)
Pre-baited...    ...    ...	16,378	12,217	12,308	12,690
Pre-bait taken    ...    ...	9,329	2,677	2,601	2,407
Poison baited    ...    ...	11,141	4,823	4,712	4,395

TABLE 69  
**RAT DESTRUCTION IN SEWERS**  
**ANNUAL TEST BAITING**

Test Baiting Divisions	Year 1953	Year 1961	Year 1962
Total number of manholes    ...    ...    ...	6,337	11,735	11,808
Number of manholes tested    ...    ...    ...	797	1,286	1,311
Number of manholes showing takes    ...    ...	68	52	43

TABLE 70

QUANTITY OF FOOD CONDEMNED FOR DISEASE  
OR FOUND UNFIT FOR HUMAN CONSUMPTION

						Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Veal and Pork	...	...				131	6	2	18
Offal	...	...	...	...	...	343	10	1	18
Fish (Wet)	...	...	...	...	...	22	5	1	14
Fish (Dry)	...	...	...	...	...	2	10	2	14
Shellfish	...	...	...	...	...	1	7	3	6
Poultry	...	...	...	...	...	1	11	3	16
Game	...	...	...	...	...	—	1	—	22
Rabbits and Hares		...	...	...	...	1	8	—	14
Fruit	...	...	...	...	...	213	8	—	20
Vegetables	...	...	...	...	...	382	18	—	27
Nuts	...	...	...	...	...	44	5	2	1
Dried Fruits	...	...	...	...	...	—	6	2	2
Canned Goods	...	...	...	...	...	57	5	1	4
Sundries	...	...	...	...	...	2	4	1	14
						1,204	10	—	22



TABLE 71

## NUMBER OF CASES OF CERTAIN INFECTIOUS DISEASES REPORTED DURING 1962

	January	February	March	April	May	June	July	August	September	October	November	December	TOTALS
Scarlet Fever ...	25	25	27	14	15	12	16	10	15	24	36	31	250
Measles and German Measles ...	64	105	166	248	177	253	776	1034	522	1898	2987	2603	10,833
Diphtheria ...	—	—	—	—	—	—	—	—	—	1	—	—	1
Cerebro-spinal Fever	4	3	3	3	—	—	—	1	—	—	1	1	16
Poliomyelitis													
Paralytic ...	1	—	1	—	—	—	—	—	—	—	—	—	2
Non-paralytic ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia and In- fluenzal Pneumonia	113	22	42	21	22	22	18	9	8	28	26	48	379
Dysentery ...	19	28	23	28	53	27	25	19	12	22	20	20	296
Whooping Cough ...	7	5	2	12	15	16	22	22	33	30	26	18	208
Food Poisoning ...	7	1	4	—	3	2	3	4	3	4	4	2	37

TABLE 72

## ANNUAL RETURN OF FOOD POISONING NOTIFICATIONS—1962

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Food Poisoning Notifications (Corrected)					
As returned to Registrar-General ...	12	5	10	10	37
Cases Otherwise Ascertained ... ..	1	1	2	3	7
Fatal Cases ... ..	—	—	—	—	—

Symptomless Excretors ... .. 67

## SINGLE CASES

	No. of Cases		Total No. of Cases
	Notified	Otherwise Ascertained	
Agent identified ...	37	7	44
Agent not identified ...	—	—	—

## AGENTS

*Staph. pyogenes* ... .. 12      *Salmonella organisms* ... .. 32

## TYPE

<i>Sal. bareilly</i> ... ..	1	<i>Sal. newport</i> ... ..	1
<i>Sal. bredeney</i> ... ..	2	<i>Sal. oranienberg</i> ... ..	1
<i>Sal. eastbourne</i> ... ..	1	<i>Sal. ruira</i> ... ..	1
<i>Sal. enteritides</i> ... ..	2	<i>Sal. stanley</i> ... ..	1
<i>Sal. give</i> ... ..	1	<i>Sal. tennessee</i> ... ..	1
<i>Sal. manhattan</i> ... ..	1	<i>Sal. typhimurium</i> ... ..	17
<i>Sal. muenchen</i> ... ..	2		



TABLE 73

## AGE PERIODS OF DEATHS FROM TUBERCULOSIS DURING 1962

Age Periods.	RESPIRATORY		MENINGES AND C.N.S.		OTHER FORMS	
	Males.	Females.	Males.	Females.	Males.	Females.
0— 1	—	—	—	—	—	—
1— 4	—	—	—	—	—	—
5— 9	—	—	1	1	—	—
10—14	—	—	—	—	—	—
15—19	—	—	—	—	—	—
20—24	—	—	—	—	—	—
25—34	2	1	—	—	1	—
35—44	2	5	—	—	2	—
45—54	12	3	—	—	—	—
55—64	12	4	—	—	1	—
65—over	29	4	—	—	—	1
TOTALS ...	57	17	1	1	4	1

TABLE 74

## INCIDENCE, PREVALENCE AND MORTALITY FROM RESPIRATORY TUBERCULOSIS

1948-1962

Year	New cases notified	Incidencce Rate per 1,000 population for new cases	Number of Deaths	Death Rate per 1,000 population	England and Wales Death Rate	Estimated Number on register mid-year	Prevalence rate per 1,000 population	Mortality rate per 1,000 cases
1948	1,618	2.04	630	0.79	0.44	4,613	5.82	136.6
1949	1,619	2.02	542	0.68	0.40	5,122	6.4	105.8
1950	1,572	1.96	481	0.60	0.32	5,654	7.0	85.1
1951	1,531	1.95	406	0.52	0.27	6,830	8.7	59.4
1952	1,569	1.98	269	0.34	0.21	6,876	8.7	39.1
1953	1,382	1.75	258	0.33	0.18	7,665	9.7	33.6
1954	1,135	1.44	232	0.29	0.16	8,167	10.4	28.4
1955	1,082	1.39	185	0.24	0.13	8,524	10.9	21.7
1956	1,016	1.31	137	0.177	0.109	8,539	11.0	16.0
1957	1,021	1.33	123	0.160	0.095	8,670	11.3	14.2
1958	795	1.04	109	0.143	0.089	8,330	10.9	13.1
1959	1,633	2.15	102	0.135	0.077	9,310	12.3	10.9
1960	439	0.58	81	0.107	0.068	7,783	10.3	10.4
1961	405	0.54	80	0.107	0.065	6,960	9.3	11.5
1962	438	0.59	74	0.099	0.059	6,165	8.3	12.0



TABLE 75

METEOROLOGICAL SUMMARY, 1962

Recorded at Liverpool Observatory and Tidal Institute, Bidston.

Month	Mean Barometric Pressure in.		Temperature °F			Rainfall in.		No. of days with rain	Sunshine hrs.	
	1962	Normal	Mean		1962	Normal	1962		Normal	
			1962	Mean Max.						Mean Min.
January	29.80	29.92	41.7	39.8	45.5	37.3	2.14	19	70.2	51.7
February	30.05	29.93	41.4	40.2	45.0	37.7	0.98	12	66.2	66.7
March	29.88	29.92	37.8	42.4	42.3	33.1	1.08	11	146.9	111.9
April ...	29.97	29.92	45.8	46.7	51.2	40.5	2.23	12	181.6	161.3
May ...	29.96	29.97	50.3	52.1	55.5	45.7	1.67	16	197.4	202.6
June ...	30.14	29.99	56.3	57.3	62.5	50.9	1.08	10	215.3	208.8
July ...	29.99	29.95	57.9	60.1	63.2	53.6	1.05	11	159.0	182.7
August	29.90	29.92	57.3	59.8	62.0	53.5	2.61	16	161.5	168.2
September	29.89	29.96	54.7	56.3	59.0	50.8	2.26	21	100.6	131.7
October	30.11	29.90	51.8	50.1	55.7	47.5	1.64	10	79.3	95.8
November	29.94	29.88	42.5	44.3	47.0	39.6	1.64	13	49.9	59.3
December	29.99	29.86	37.6	41.0	41.0	33.4	2.17	16	51.3	42.0
Year	29.97	29.93	47.9	49.2	52.5	43.6	20.55	167	1479.2	1482.7

The normal is the long period average for that time of year.







TABLE 76.  
TABLE SHOWING POPULATION, BIRTH RATES, DEATH RATES, INFANT AND MATERNAL MORTALITY RATES, ETC., OF A NUMBER OF THE LARGER AUTHORITIES FOR 1962.

Name of Authority	Birmingham	Bradford	Bristol	Cardiff	Kingston-upon-Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle-upon-Tyne	Nottingham	Sheffield
Registrar-General's estimated population for 1962 ... ..	1,115,080	296,220	434,260	260,160	301,640	514,640	272,500	745,230	659,170	267,090	314,360	495,240
Comparability factor—												
(a) Births ... ..	0.95	1.00	1.00	0.94	0.96	0.98	1.01	0.93	0.96	0.97	0.98	1.01
(b) Deaths ... ..	1.16	0.98	0.97	1.13	1.23	1.13	1.00	1.22	1.17	1.12	1.12	1.10
Crude birth rate per 1,000 population ... ..	19.97	19.61	16.7	19.14	19.88	18.4	18.67	22.113	20.59	17.85	19.86	17.39
Birth rate as adjusted by factor... ..	18.96	19.61	16.7	17.99	19.08	18.0	18.86	20.565	19.77	17.31	19.46	17.56
Crude death rate per 1,000 population ... ..	11.15	14.05	12.65	11.50	10.99	12.0	12.80	12.294	13.30	12.47	12.14	12.68
Death rate as adjusted by factor ... ..	12.93	13.77	12.27	12.99	13.53	13.5	12.80	14.999	15.56	13.96	13.60	13.95
Infant mortality rate per 1,000 live births ... ..	22.77	26.86	20.8	26.31	28.35	23.4	23.20	27.975	30.43	22.24	24.67	20.20
Neonatal mortality rate per 1,000 live births ... ..	16.12	15.50	13.7	19.88	19.85	16.9	14.35	18.023	19.38	13.43	15.54	15.44
Stillbirth rate per 1,000 total births ... ..	19.03	18.58	16.0	19.11	19.78	18.8	17.76	19.807	21.77	20.75	19.04	15.21
Perinatal mortality rate per 1,000 total births ... ..	32.73	31.77	27.8	35.66	33.68	34.0	28.77	35.451	38.20	32.87	32.53	28.70
Maternal mortality rate per 1,000 total births ... ..	0.48	0.17	0.14	—	0.5	0.62	0.39	0.297	0.50	0.41	0.47	0.23
Tuberculosis rates per 1,000 population												
(a) Primary notifications—												
Respiratory ... ..	0.60	0.87	0.30	0.52	0.4	0.58	0.47	0.588	0.59	0.558	0.57	0.53
Non-respiratory... ..	0.08	0.21	0.03	0.05	0.016	0.05	0.10	0.067	0.05	0.139	0.09	0.08
(b) Deaths—Respiratory ... ..	0.07	0.09	0.05	0.09	0.06	0.05	0.062	0.099	0.11	0.086	0.083	0.11
Non-respiratory... ..	0.01	0.01	0.014	0.004	0.01	0.004	0.015	0.009	0.01	0.007	0.006	0.01
Death Rates per 1,000 population from—												
Cancer (all forms including Leukaemia and Aleukaemia) ... ..	2.08	2.22	2.13	2.16	2.14	2.18	2.25	2.307	2.42	2.55	2.14	2.48
Cancer of Lungs and Bronchus ... ..	0.52	0.56	0.49	0.51	0.56	0.65	0.54	0.649	0.72	0.77	0.59	0.66
Meningococcal infections ... ..	0.00	0.0135	0.005	—	—	—	0.0037	0.003	0.01	—	0.006	0.00
Whooping Cough ... ..	—	—	—	—	—	—	—	—	—	0.004	0.003	—
Influenza ... ..	0.06	0.0405	0.08	0.05	0.084	0.03	0.051	0.087	0.19	0.030	0.09	0.07
Measles ... ..	0.00	0.0067	0.002	—	—	—	0.0037	0.004	0.00	—	0.003	—
Acute Poliomyelitis and Encephalitis ... ..	0.01	—	—	—	—	—	—	—	—	—	—	—
Diarrhoea (under 2 years) ... ..	0.02	0.0169	0.012	0.004	—	0.004	0.0073	0.021	0.05	0.011	0.022	0.02
Diarrhoea (under 2 years) (per 1,000 live births) ... ..	1.17	0.8609	0.69	0.21	—	0.21	0.39	0.971	2.36	0.629	1.12	0.93





TABLE 77  
MATERNAL DEATHS

Cause of Death	Age	Parity	Gestation Weeks	ANTE NATAL CARE								DELIVERED		DIED		Previous Health	Type of Delivery of Child	Death Post Partum Hours	Anaesthetic	Period of Pregnancy at Booking			Remarks
				R.M.P.		Hospital		Midwife		L.A.C.		Home	Hosp.	Home	Hosp.					Period of Pregnancy at Booking			
				Before	After	Before	After	Before	After	Before	After									R.M.P.	Midwife	Hospital	
				36/52	36/52	36/52	36/52	36/52	36/52	36/52	36/52												
HAEMORRHAGE—1. 1. (a) Shock ... (b) Concealed Accident haemorrhage in uterus. Coroner after post mortem.	32	7	18	5	—	2	—	—	—	—	—	Un-delivered	—	X	—	Fair. Rh negative blood with antibodies. Antepartum haemorrhage two previous pregnancies blood transfusions. Threatened abortion at 14th week of present pregnancy.	Undelivered	—	Nil	12 wks.	—	14 wks.	An unusual case of sudden death from placental abruption as early as 18th week.  Unavoidable death.
AIR EMBOLISM ABORTION 2. 1. Air embolism due to attempted self induced abortion. Coroner after inquest.	26	4	12	—	—	—	—	—	—	—	—	Un-delivered	—	X	—	Good, but depressed by this pregnancy.	Undelivered	—	Nil	Not booked			Self-induced abortion by introduction of soap and water into uterus with a douche. Avoidable death.
2. Air embolism due to attempted self induced abortion. Coroner after inquest.	31	2	16	3	—	—	—	—	—	—	—	Un-delivered	—	X	—	Good, but worried by debts.	Undelivered	—	Nil	12 wks.	—	—	Self-induced abortion by introduction of soap and water into uterus with enema syringe.  Avoidable death.
OBSTETRIC SHOCK—1. 1. (a) Obstetric Shock ... (b) Recent delivery. 2. Hypertension.	41	7	40	4	—	1	4	—	—	—	—	—	Hosp.	—	X	Fair. Pneumonia and pleurisy one year ago.	Normal Stillbirth	1 hr. 10 mins.	Nil	10 wks.	—	10 wks.	Obstetric shock. Cystitis. Hypertension, induced labour. Intrauterine death of foetus. Patient became unconscious 1½ hours after start of labour —? eclamptic fit. Normal delivery of stillborn infant 1 hour later. Another hour later patient collapsed suddenly. Blood transfusion, oxygen via trachea and direct cardiac massage. Unavoidable death.
TOXAEMIA—I. 1. (a) Uraemia ... (b) Renal Insufficiency. (c) Toxaemia of Pregnancy. 2. Hydatidiform Mole.	40	8	17	2	—	Admitted at 13 weeks		—	—	—	—	—	Hysterectomy.	—	X	Fair.	Hysterectomy	48	General	13 wks.	—	13 wks.	Multigravida 8. Not very co-operative. Continued haemorrhage from 11 weeks pregnant. Admitted hospital at 13 weeks. Attack of cardiac failure. Oedema + Albuminuria +. Hydatidiform Mole. Total hysterectomy and bilateral salpingo-oophorectomy. Patient developed gross pulmonary oedema—post operative. Later Tachycardia—cerebral haemorrhage. Died suddenly. Unavoidable death.





TABLE 78  
ASSOCIATED MATERNAL DEATHS

Cause of Death	Age	Parity	Gestation Weeks	ANTE NATAL CARE								DELIVERED		DIED		Previous Health	Type of Delivery of Child	Death Post Partum Hours	Anaesthetic	Period of Pregnancy at Booking			Remarks
				R.M.P.		Hospital		Midwife		L.A.C.		Home	Hosp.	Home	Hosp.					R.M.P.	Midwife	Hospital	
				Before	After	Before	After	Before	After	Before	After												
				36/52	36/52	36/52	36/52	36/52	36/52	36/52	36/52												
1. (a) Acute Left Ventricular failure (b) Hypertension 2. Pregnancy.	42	3	36	7	1	Frequent	1	—	—	—	—	Undelivered	—	X	—	Essential Hypertension.	—	—	—	8 wks.	—	Early	A case of essential hypertension. Sudden rise of BP-185/100. Patient refused to go into hospital immediately, walked home distance of half mile. Had a sudden attack of cardiac failure and died undelivered.
1. (a) Pluerisy Due to Bronchopneumonia.	23	3	36	Frequent	—	Admitted	—	2	—	—	—	—	X	—	X	Fairly good Often depressed.	Normal Stillbirth	6	—	26 wks.	28 wks.	Not booked	Collapsed at home, transferred to hospital as emergency. Delivery of stillborn infant followed by death of mother a few hours later due to pleurisy and bronchopneumonia.
1. (a) Staphylococcal Pneumonia. (b) Pulmonary Sarcoidosis.	20	1	32	Frequent	Delivered at 32wks.	Frequent	Delivered at 32wks.	—	—	—	—	—	X	—	X	Very poor. Bronchiectasis and Asthma.	Normal	3 months	—	10wks.	—	10wks.	Unco-operative patient who frequently took her own discharge from various chest units. Progressive disease of lungs. Pregnancy was only an incident and did not affect the progress of the disease.





## CITY OF LIVERPOOL

TABLE 79.

Infant Mortality during the year 1962.  
Net deaths from stated causes at various ages under One Year.

CAUSE OF DEATH					Under 1 day	1 to 2 days	2 to 3 days	3 to 4 days	4 to 5 days	5 to 6 days	6 to 7 days	1 to 2 weeks	2 to 3 weeks	3 to 4 weeks	Total deaths under 28 days	28 days to 2 months	2 to 3 months	3 to 4 months	4 to 5 months	5 to 6 months	6 to 7 months	7 to 8 months	8 to 9 months	9 to 10 months	10 to 11 months	11 to 12 months	Total deaths under 1 year
Tuberculosis of Respiratory System	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
„ Meninges, etc.	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
„ Intestines, etc.	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
„ Other Organs	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal Infections	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Acute Poliomyelitis	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Scarlet Fever	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chickenpox	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Psychosis	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis (non-tubercular)	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
Influenza	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Pneumonia	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	10	14	11	3	2	3	5	2	3	—	—	53
Bronchitis	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	6	10	10	7	—	3	2	—	1	1	—	40
Enteritis	...	...	...	...	—	—	—	—	—	—	—	—	—	—	—	2	6	4	1	2	1	—	—	—	—	—	16
Malformations	...	...	...	...	25	4	4	1	1	2	2	7	5	3	54	10	4	4	1	2	2	1	2	—	1	1	82
Injury at Birth	...	...	...	...	22	7	2	3	1	—	1	1	1	—	38	—	—	—	—	—	—	—	—	—	—	—	38
Infections of Newborn	...	...	...	...	1	1	4	1	1	—	—	4	7	3	22	—	—	—	—	—	—	—	—	—	—	—	22
Other Diseases of Early Infancy	...	...	...	...	120	34	13	4	2	1	1	1	2	—	178	1	—	—	—	—	—	—	—	—	—	—	179
Other Causes	...	...	...	...	3	—	1	—	—	1	—	—	—	—	5	5	5	—	3	2	—	2	1	2	1	1	27
Totals	...	...	...	...	171	46	24	9	5	4	4	13	15	6	297	34	39	30	15	9	9	10	5	7	4	2	461
					263 (Total Deaths under 7 days)																						

Net Births in the year { Legitimate ... 15,459  
Illegitimate ... 1,020

Net Deaths in the year of { Legitimate Infants 426  
Illegitimate Infants 35





TABLE 80.  
CITY OF LIVERPOOL.

DEATHS REGISTERED DURING THE YEAR 1962

CAUSE OF DEATH			SEX		AGE—BELOW																				TOTALS.			
					Males.	Females.	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70		75	80	85
ALL CAUSES .....			4606	4556	461	27	9	12	13	24	14	23	35	25	57	112	161	261	481	701	949	1054	1349	1357	1181	652	204	9162
Class	1.—Infections and Parasitic Diseases ..	80	30	2	1	...	1	...	2	...	1	3	1	3	4	10	5	12	11	12	20	12	7	3	...	...	110	
"	II.—Neoplasms .....	946	784	2	1	...	1	...	5	2	5	6	6	15	26	46	88	150	233	254	251	251	210	124	41	12	1730	
"	III.—Allergic, Metabolic Diseases, etc. ....	36	57	1	1	...	...	1	...	...	1	1	2	1	1	4	2	11	6	12	16	11	17	5	...	...	93	
"	IV.—Diseases of the Blood .....	22	22	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2	2	5	14	7	3	5	4	67	
"	V.—Mental, and Psychoneurotic Diseases ..	34	33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	12	10	17	13	9	2	44	
"	VI.—Diseases of Nervous System .....	445	669	4	3	...	3	2	1	4	...	4	1	5	9	14	22	46	63	109	136	196	189	187	94	22	1114	
"	VII.—Diseases of Circulatory System .....	1511	1571	...	...	...	...	...	...	...	1	3	3	14	35	48	86	164	220	320	381	487	501	458	271	90	3082	
"	VIII.—Diseases of Respiratory System .....	945	829	94	7	1	1	1	2	1	4	1	...	5	8	15	27	65	105	170	177	267	318	295	135	45	1774	
"	IX.—Diseases of Digestive System .....	101	104	19	1	1	...	...	1	...	1	...	2	...	3	2	8	15	15	25	37	25	22	9	4	205		
"	X.—Diseases of Genito-urinary System ..	60	51	2	1	...	...	...	1	...	2	1	...	2	...	1	7	3	14	10	12	14	21	14	5	1	111	
"	XI.—Diseases of Pregnancy .....	...	5	...	...	...	...	...	...	...	...	1	2	...	2	...	...	...	...	...	...	...	...	...	...	...	5	
"	XII.—Diseases of Skin .....	2	7	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	5	...	...	...	1	9	
"	XIII.—Diseases of Bones .....	4	14	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	3	...	4	2	1	3	...	18	
"	XIV.—Congenital Malformations .....	58	53	82	5	1	2	3	4	1	1	...	1	...	...	...	2	1	1	5	...	1	...	1	...	...	239	
"	XV.—Diseases of Early Infancy .....	148	91	239	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	53	
"	XVI.—Senility and Ill-defined Diseases ..	13	40	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	2	1	8	12	14	13	...	
"	XVII.—Deaths from Violence .....	201	196	16	7	6	4	5	8	6	7	16	8	10	23	16	12	12	27	34	17	44	30	43	36	10	397	
Class	1.—Tuberculosis of Respiratory System.....	57	17	...	...	...	...	...	...	...	...	1	2	2	5	5	10	6	10	18	8	4	3	...	...	...	74	
"	Tuberculosis of Meninges, etc. ....	1	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	
"	Tuberculosis of Intestines, etc. ....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
"	Tuberculosis of Other Organs .....	4	1	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1	...	...	...	1	...	...	...	...	5	
"	Syphilis .....	5	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	2	1	1	...	...	...	...	7	
"	Typhoid Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
"	Dysentery .....	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
"	Diphtheria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
"	Whooping Cough .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
"	Meningococcal Infections .....	2	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	
"	Acute Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
"	Measles .....	...	3	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	
"	Other Infectious Diseases .....	10	6	...	...	...	...	...	...	...	2	...	...	...	1	3	...	2	3	1	...	3	1	...	...	...	16	
Class	2.—Malignant Neoplasm of Buc. Cavity.....	22	8	...	...	...	...	...	...	...	...	...	...	2	...	...	1	2	2	3	7	6	4	1	2	...	30	
"	Malignant Neoplasm of Digestive Syst. ....	267	288	...	...	...	...	...	...	...	...	3	2	3	9	23	35	57	79	79	94	86	60	21	4	...	555	
"	Malignant Neoplasm of Respiratory Syst. ....	413	71	...	...	...	...	...	...	2	...	...	...	3	8	5	29	52	91	87	82	62	36	22	4	1	484	
"	Malignant Neoplasm of Breast .....	3	131	...	...	...	...	...	...	...	...	...	...	...	3	8	8	15	21	27	17	12	13	5	3	2	134	
"	Malignant Neoplasm of Female G. Organs ..	...	61	...	...	...	...	...	...	...	...	...	1	1	5	7	7	10	6	4	10	5	3	1	1	...	61	
"	Malignant Neoplasm of Other Organs .....	220	199	...	1	...	...	...	1	2	4	3	9	7	17	19	36	47	49	58	63	58	31	10	4	...	419	
"	Leukaemia .....	14	22	...	...	...	1	1	4	1	1	1	...	...	2	1	1	3	3	2	3	4	6	2	...	...	36	
"	Benign Neoplasms .....	7	4	2	...	...	...	...	1	...	...	1	...	...	...	1	...	...	2	1	1	...	2	...	...	...	11	
Class	3.—Thyrototoxicosis .....	...	8	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	4	1	1	1	...	...	...	...	8	
"	Diabetes mellitus .....	13	29	...	...	...	...	...	...	...	...	...	...	...	...	2	1	6	3									





TABLE 81  
NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1962.

DISEASE.	NUMBER OF CASES NOTIFIED.													TOTAL DEATHS
	At all Ages.	At Ages—Years												
		Under 1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	
Diphtheria .....	1	—	—	—	—	—	1	—	—	—	—	—	—	—
Scarlet Fever.....	250	—	7	13	20	28	127	30	21	3	1	—	—	—
Enteric Fever (including Para- typhoid) .....	1	—	—	—	—	—	—	—	—	—	1	—	—	1
Puerperal Pyrexia.....	489	—	—	—	—	—	—	—	66	375	46	2	—	—
Pneumonia .....	379	73	28	21	16	6	24	10	8	28	30	80	55	129
Cerebro-spinal Fever .....	16	6	3	1	1	—	2	—	1	1	—	1	—	2
Poliomyelitis (Paralytic) .....	2	—	—	—	—	—	2	—	—	—	—	—	—	—
Poliomyelitis (Non-paralytic) .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery .....	296	41	50	38	30	16	66	20	10	10	10	4	1	1
Ophthalmia Neonatorum .....	91	91	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas .....	27	—	—	—	—	—	—	—	—	—	10	11	6	1
Malaria .....	9	—	—	—	—	—	—	—	2	5	1	1	—	2
Measles .....	10711	531	1407	1593	1556	1401	4001	164	44	11	2	1	—	3
Whooping Cough .....	208	33	34	33	30	27	45	4	1	—	—	1	—	—
Food Poisoning.....	37	8	2	3	2	3	1	3	—	9	—	6	—	—
TOTALS.....	12517	783	1531	1702	1655	1481	4269	231	153	442	101	107	62	139





TABLE 82																						
TUBERCULOSIS																						
Analysis of New Cases 1962																						
1962	NATURE OF DIAGNOSIS							TYPE OF TUBERCULOSIS						ETHNIC GROUP		HOUSING CONDITIONS						
WARD	Illness	Contact	Mass Radiography	Routine Adult Examination	Child Welfare Examination	School Health Examination	Other Examination	Pulmonary Tuberculosis	Tuberculous Meningitis	Bone and Joint Tuberculosis	Tuberculous Adenitis	Abdominal Tuberculosis	Kidney and Other sites	United Kingdom	Other	Satisfactory—Separate House	Unsatisfactory—Separate House	Rooms Only	Institution	Other	Separate Bedroom	Separate Bed
Abercromby ...	12	1	2	1	—	—	1	14	—	—	—	1	2	14	3	6	3	8	—	—	4	1
Aigburth ... ..	9	2	—	3	—	1	2	15	—	—	1	—	1	17	—	16	—	1	—	—	—	—
Allerton ... ..	3	1	1	—	—	—	2	5	—	—	—	—	—	5	—	6	—	—	—	—	3	2
Anfield ... ..	10	2	2	—	—	—	1	14	—	—	—	—	1	14	1	11	2	2	—	—	2	4
Arundel ... ..	10	1	—	—	—	1	—	11	—	—	—	—	1	12	—	7	1	3	—	1	5	—
Breckfield ... ..	7	2	1	—	—	—	—	9	1	—	—	—	—	9	1	5	4	1	—	—	—	—
Broadgreen... ..	7	—	3	1	—	—	—	9	—	—	—	—	2	10	1	10	1	—	—	—	—	—
Central ... ..	10	4	—	1	—	1	—	16	—	—	—	—	—	13	3	9	—	3	—	4	2	3
Childwall ... ..	3	1	3	—	—	1	—	8	—	—	—	—	—	8	—	8	—	—	—	—	4	1
Church ... ..	10	—	1	1	—	1	1	9	2	—	1	1	1	12	2	11	1	1	1	—	4	4
Clubmoor ... ..	1	—	1	—	—	—	2	4	—	—	—	—	—	4	—	4	—	—	—	—	1	—
County ... ..	5	3	1	1	—	—	—	9	—	—	—	—	1	10	—	4	6	—	—	—	—	2
Croxteth ... ..	3	1	—	—	—	—	1	5	—	—	—	—	—	4	1	4	1	—	—	—	—	—
Dingle... ..	9	2	—	1	1	—	—	13	—	—	—	—	—	13	—	11	—	—	—	2	7	2
Dovecot ... ..	7	—	1	1	—	—	1	10	—	—	—	—	—	10	—	10	—	—	—	—	5	1
Everton ... ..	15	1	1	1	—	1	—	17	—	1	—	—	1	18	1	6	8	3	—	2	3	3
Fairfield ... ..	14	1	—	1	—	—	—	14	—	1	—	—	1	14	2	11	3	2	—	—	6	—
Fazakerley ... ..	6	—	—	—	—	—	—	6	—	—	—	—	—	6	—	6	—	—	—	—	3	—
Gillmoss ... ..	14	1	1	—	—	—	—	15	—	—	1	—	—	16	—	13	1	1	—	1	—	—
Granby ... ..	22	—	1	1	1	—	1	24	—	—	2	—	—	18	8	12	2	9	—	3	8	1
Kensington... ..	11	2	—	2	—	—	1	15	—	1	—	—	—	16	—	8	4	3	—	1	3	2
Low Hill ... ..	12	2	—	—	—	—	—	13	—	—	1	—	—	14	—	11	2	1	—	—	—	—
Melrose ... ..	11	—	1	1	—	—	1	11	—	—	—	2	1	14	—	7	4	—	3	—	—	1
Netherfield... ..	2	—	—	—	—	—	1	2	—	—	—	—	1	2	1	1	1	—	—	—	—	—
Old Swan ... ..	10	3	1	—	—	—	—	13	—	—	—	—	1	14	—	14	—	—	—	—	8	2
Picton... ..	7	—	—	2	—	—	—	8	—	1	—	—	—	8	1	8	—	—	—	1	5	1
Pirrie ... ..	9	—	2	1	—	—	1	12	—	1	—	—	—	13	—	13	—	—	—	—	5	—
Princes Park ...	15	—	—	2	—	—	—	15	—	2	—	—	—	13	4	6	1	10	—	—	4	2
St. Domingo ...	6	2	1	—	1	—	—	10	—	—	—	—	—	10	—	3	2	3	—	2	—	—
St. James ... ..	21	1	4	1	—	—	—	24	1	—	2	—	—	15	12	13	1	3	3	7	3	6
St. Mary's ... ..	4	1	1	1	—	1	—	8	—	—	—	—	—	8	—	7	1	—	—	—	3	2
St. Michael's ...	5	—	—	—	—	—	—	3	—	—	—	—	2	5	—	4	—	1	—	—	2	—
Smithdown... ..	14	—	—	1	—	—	—	14	—	—	1	—	—	12	3	9	2	1	1	2	2	2
Speke ... ..	9	1	1	2	—	1	1	12	1	—	—	2	—	13	2	14	—	—	—	1	2	1
Sandhills ... ..	12	1	1	—	—	—	1	12	—	—	3	—	—	15	—	9	4	2	—	—	—	—
Tuebrook ... ..	4	—	2	—	—	1	—	6	—	—	1	—	—	7	—	4	2	—	—	1	—	—
Vauxhall ... ..	9	—	1	—	—	—	—	8	—	—	—	2	—	10	—	7	3	—	—	—	1	1
Warbreck ... ..	8	—	1	1	—	—	—	9	—	1	—	—	—	10	—	7	2	—	1	—	1	—
Westminster ...	4	—	1	—	—	—	1	6	—	—	—	—	—	6	—	4	1	1	—	—	2	2
Woolton ... ..	4	3	2	1	—	—	—	10	—	—	—	—	—	10	—	8	2	—	—	—	1	2
TOTALS ...	354	39	38	28	3	9	17	438	5	8	13	8	16	442	46	327	65	59	9	28	99	48





TABLE 83  
TUBERCULOSIS—AGE GROUPS—1962

	—1		1		2		3		4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		65-69		70-74		75-79		80+		Totals		Ward Population	Rate per 1,000			
WARD	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F							
Abercromby ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	2	1	—	2	1	—	—	1	—	3	1	3	—	—	—	—	—	—	—	—	—	—	—	—	12	5	14,680	1.20		
Aigburth ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	1	1	2	—	—	—	1	—	—	2	2	2	2	1	—	—	—	—	—	—	1	—	—	—	—	8	9	21,640	0.80	
Allerton ...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	2	—	—	—	—	—	1	—	—	—	—	—	—	—	—	4	2	15,910	0.40			
Anfield ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	3	1	2	—	1	—	—	—	—	1	1	—	—	1	—	1	2	—	—	—	—	—	—	—	—	—	5	10	21,900	0.70		
Arundel ...	—	—	—	—	1	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1	—	—	1	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	2	1	—	—	—	7	5	19,860	0.60		
Breckfield ...	—	—	—	—	2	—	1	—	—	—	—	—	—	—	—	—	—	1	—	1	1	1	1	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	6	4	17,170	0.60		
Broadgreen...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	—	—	—	1	—	—	—	3	—	—	—	2	—	1	—	—	—	—	—	—	11	—	17,780	0.60		
Central ...	—	—	—	—	—	—	1	—	2	—	—	—	1	—	—	2	1	1	2	—	1	—	—	—	1	2	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	10	6	10,740	1.60		
Childwall ...	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	1	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	4	4	26,480	0.40		
Church ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	4	—	—	—	—	—	1	—	—	1	1	1	—	1	1	—	—	—	—	—	—	—	—	—	1	—	4	10	21,280	0.60		
Clubmoor ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	1	—	—	—	—	—	—	—	—	3	1	17,560	0.60		
County ...	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	1	1	—	—	—	—	2	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—	8	2	21,000	0.50		
Croxteth ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	1	—	1	—	—	—	—	—	4	1	18,220	0.30		
Dingle...	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	4	2	—	—	—	—	—	—	3	—	1	—	1	—	—	—	—	—	—	—	1	—	—	—	—	10	3	19,030	0.70		
Dovecot ...	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	1	—	—	1	—	—	2	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	8	2	22,420	0.45	
Everton ...	—	—	—	—	—	—	—	—	—	—	1	—	1	1	1	—	—	—	1	2	—	1	—	1	—	1	2	2	2	—	—	1	—	1	—	—	—	—	—	—	1	—	—	8	11	15,350	1.20		
Fairfield ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	1	1	1	1	—	—	2	—	—	—	—	2	1	—	2	—	2	—	—	—	—	1	—	—	—	—	—	10	6	21,150	0.75	
Fazakerley ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	4	2	17,680	0.30	
Gillmoor ...	—	—	—	1	—	—	—	—	1	—	—	—	—	—	1	1	1	—	1	—	—	1	—	1	1	—	—	2	—	2	—	2	—	1	—	—	—	—	—	—	1	1	—	—	—	10	6	24,980	0.60
Granby ...	—	1	—	—	—	—	—	—	—	1	—	1	—	—	2	—	—	2	2	1	2	—	1	3	2	2	2	—	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—	13	13	17,600	1.50		
Kensington...	—	—	—	—	—	—	1	—	—	—	—	1	—	—	1	—	1	1	—	—	—	4	1	—	—	—	—	1	—	—	1	—	—	1	1	1	1	1	—	—	—	—	—	7	9	18,690	0.90		
Low Hill ...	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—	1	2	—	—	—	—	1	—	—	—	2	—	3	—	—	—	1	—	—	—	—	—	—	—	—	—	—	12	2	14,500	0.		





# CITY of LIVERPOOL

## MUNICIPAL WARDS

### 1962

SHOWING

- BIRTH RATE per 1000 population
- DEATH RATE per 1000 population
- INFANT DEATH RATE per 1,000 live births
- NUMBER OF PERSONS PER ACRE



## CITY OF LIVERPOOL

POPULATION  
745,230

BIRTH RATE	22.1	per 1000 population
DEATH RATE	12.3	per 1000 population
INFANT DEATH RATE	28.0	per 1,000 live births
NUMBER OF PERSONS PER ACRE	26.8	















